



Final Conference 2012

Day 2

epoc@eurojust.europa.eu

<http://www.eurojust.europa.eu/epoc>



With financial support from Criminal Justice Programme 2008
European Commission – Directorate-General Justice, Freedom and Security



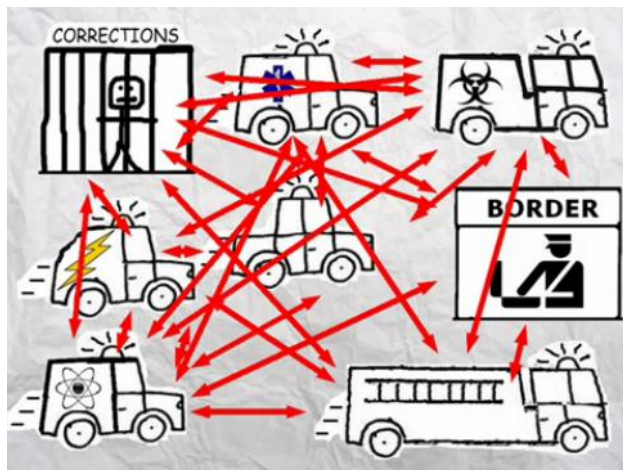
EPOC IV

MARCH 2012

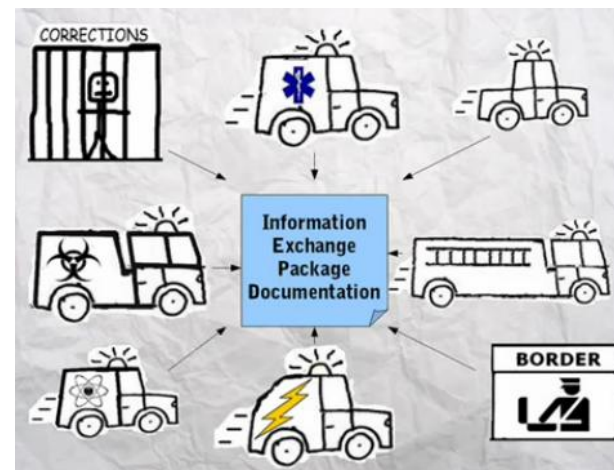
WHAT IS NIEM?

“NIEM SIMPLIFIED”

- <http://www.youtube.com/watch?v=BA1jY8LJ8tM>



Without NIEM



With NIEM

“NIEM VIDEOS”

Additional Videos available on YouTube. Search for NIEMConnects

Examples:

- What is NIEM

<http://www.youtube.com/watch?v=P9abGXRda7A>

- The Magic of NIEM

<http://www.youtube.com/watch?v=hHjwliwg-YQ>

NIEM PROCESS IN THE UNITED STATES

NIEM CONNECTS COMMUNITIES



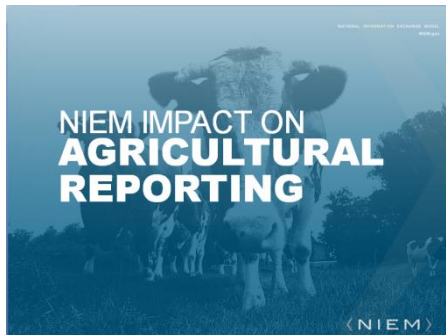
Amber Alerts: A child goes missing every 40 SECONDS in the U.S., over 2,100 per day.



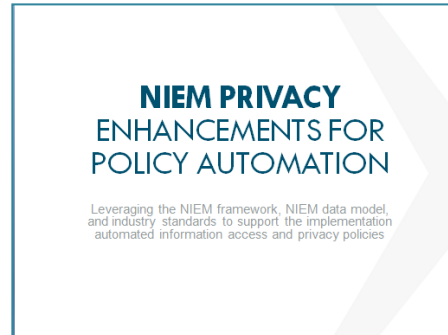
Prescription Drug Monitoring: 1 in 5 teens are abusing prescription drugs to get high.



Cyber: In 2010, Stuxnet halted the nuclear development capability of an entire country.



Agricultural: In 2011, the technology used to produce 20% of the GDP is more advanced than systems used for reporting to the US Govt.



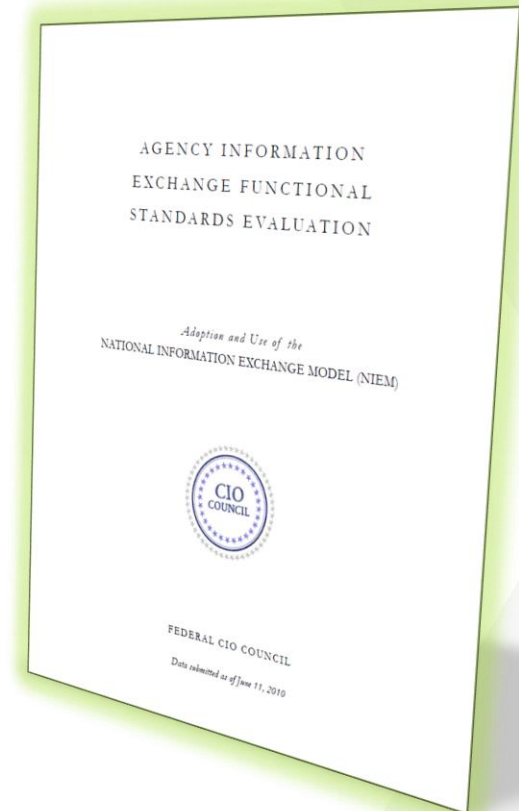
Privacy and CRCL: Current controls for protecting U.S. Person data are inadequately implemented.



Requests for Information: RFI lacks common processes making intelligence collection for partners a daunting task

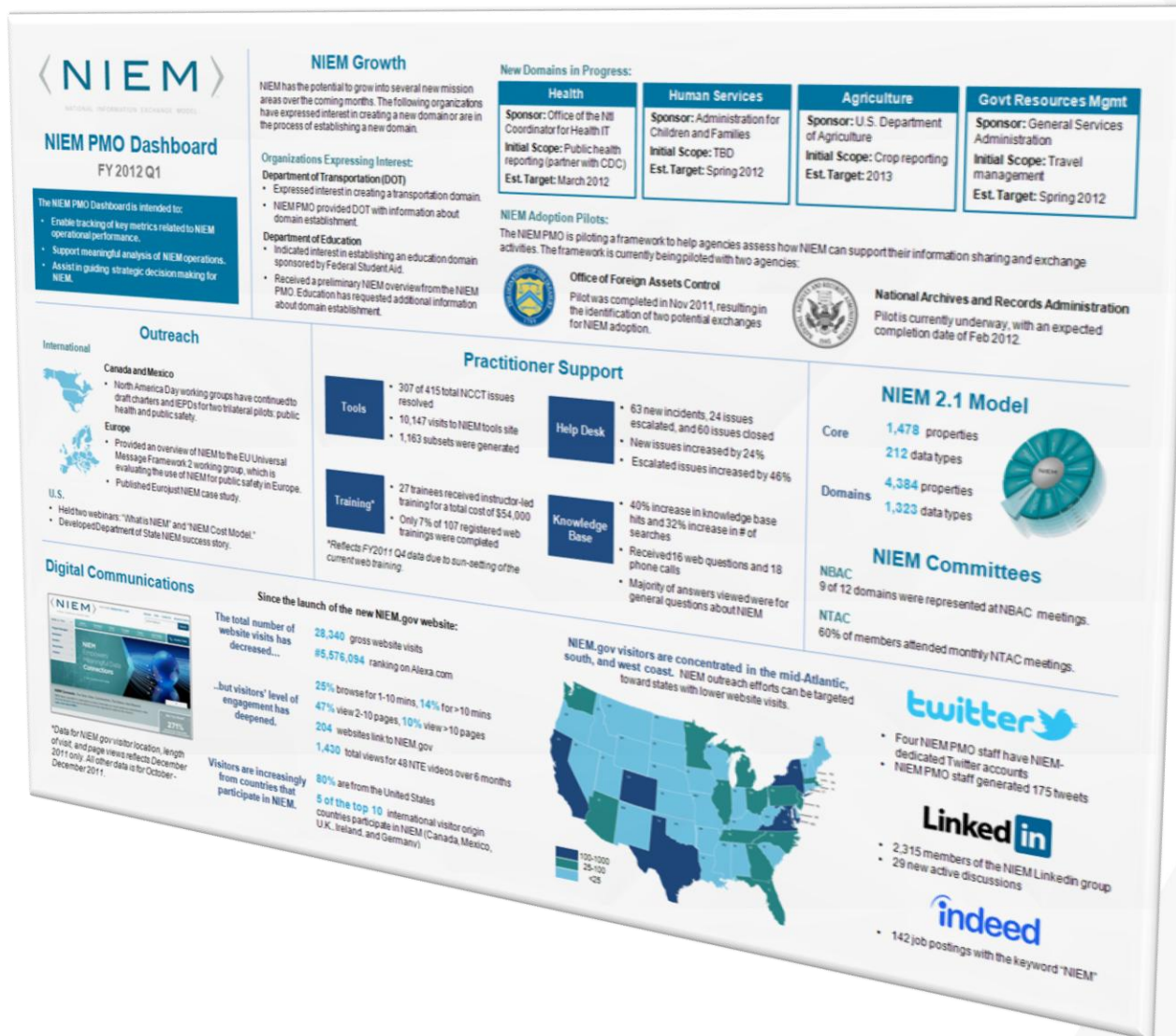
ADOPTION OF NIEM IN U.S.

| Agency | Use of NIEM | |
|---|-----------------------------|--------|
| Department of Agriculture | Committed to Use | Green |
| Department of Defense | Committed to Use | Green |
| Department of Education | Committed to Use | Green |
| Department of Energy | Committed to Use | Green |
| Department of Health and Human Services | Committed to Use | Green |
| Department of Homeland Security | Committed to Use | Green |
| Department of Housing and Urban Development | Committed to Use | Green |
| Department of Justice | Committed to Use | Green |
| Department of Labor | Committed to Use | Green |
| Department of State | Committed to Use | Green |
| Department of the Interior | Committed to Use | Green |
| Department of the Treasury | Committed to Use | Green |
| Department of Transportation | Committed to Use | Green |
| Department of Veterans Affairs | Committed to Use | Green |
| Environmental Protection Agency | Further Evaluation Required | Yellow |
| General Services Administration | Committed to Use | Green |
| National Aeronautics and Space Administration | Further Evaluation Required | Yellow |
| National Archives and Records Administration | Committed to Use | Green |
| National Science Foundation | Committed to Use | Green |
| Nuclear Regulatory Commission | Will Not Use | Red |
| Office of the Director of National Intelligence | Committed to Use | Green |
| Social Security Administration | Further Evaluation Required | Yellow |
| Geospatial Line of Business | Will Not Use | Red |
| Grants Management Line of Business | Further Evaluation Required | Yellow |
| Financial Management Line of Business | Will Not Use | Red |
| Human Resources Line of Business | Will Not Use | Red |



| | | |
|------------------|-------------------------------|--------------|
| Committed to Use | Further Evaluation Required - | Will Not Use |
|------------------|-------------------------------|--------------|

ADOPTION OF NIEM



NIEM TOUCH-POINTS IN EUROPE

CASE STUDY: EPOC IV USE OF NIEM

- Benefits identified:
 - Use of NIEM is free
 - Documentation exists already detailing the development processes, can be used by anyone wanting to participate in the communication
 - The ability to easily extend where no semantic descriptions are available
 - The availability of online training to familiarize anyone working with NIEM on the processes
 - The potential for communicating across domains

“...there was no standard that was suitable for us to use “off the shelf.” The exception to this was NIEM.”

“NIEM matches for two-thirds of data items.”

“If UMF2 chooses NIEM, could enable quicker development of future communications between the judicial and police areas within the EU.”

EU INTERACTIONS

- Universal Message Framework (UMF2) Working Group
 - NIEM Awareness Session held November 2011
 - Established to create a **common framework for structured information exchange of law enforcement data** between the EU member states and their cooperation partners
 - Attendees included LE and IT resources from the EU member states of **Bulgaria, Hungary, Norway, Finland, Poland, Germany, Denmark, Netherlands as well as organizations including Eurojust, Frontex, Interpol, and Europol**
- EU's Interoperability Solutions for European Public Administrations (ISA)
 - In contact with Vassilios Peristeras (Programme Manager) and team
- Standards and semantics for EU e-CODEX pilot
 - Provided technical information to Harry Biersteker, Department of Security and Justice the Netherlands
- EPOC IV



NIEM NORTH AMERICA INITIATIVES

CANADIAN CIO SUPPORT

Authorized users with the ability to access the **right information** at the **right time** are a prerequisite for **service delivery excellence and responsive government**.

NIEM offers tremendous potential for **cost effective, timely interoperability** and gives us [the Canadian Government] the ability to facilitate **secure information exchange** while leveraging best practices in an age of scarce resources.

Corinne Charette

CIO of Canada

NIEM AND CANADA

- Public Safety Canada, Royal Canadian Mounted Police, and other organizations have been evaluating NIEM since 2009
- In Spring 2011, Public Safety Canada acknowledged NIEM as their standard of choice
- In Summer 2011, GSA Sponsored a trilateral North America Day, resulting in two NIEM pilots with Canada and Mexico
- In Spring 2012, Public Safety Canada agreed to work on a pilot for a Center of Excellence for adoption of NIEM inside Canada and too act as a gateway for International Outreach

NORTH AMERICA DAY 2011

Highlights from North America Day:

- Trilateral MOU signed
- Purpose: Enhance information sharing among the three countries
 - Agreed to undertake two trilateral pilot projects that use NIEM; serving as prototypes for international information sharing



NAD : 2011
NORTH AMERICA DAY
Ciudad de México, 12 y 13 de julio de 2011

NORTH AMERICA DAY 2011 PILOTS

Public Safety Pilot WG

Lead: Rosanna Di Paola, CIO PS

Technical Demonstration

Standardized exchange of stolen vehicle information between US, Canada, and Mexico

Partners include

| | |
|-----------------|---|
| USA | Nlets, Department of Homeland Security, Department of Justice |
| Canada | Public Safety Canada, Royal Canadian Mounted Police, Edmonton Police Service |
| Mexico | Mexican Public Security Ministry, Mexico Ministry of Public Administration |
| Interpol | |



NORTH AMERICA DAY 2011 PILOTS

Public Health Pilot WG

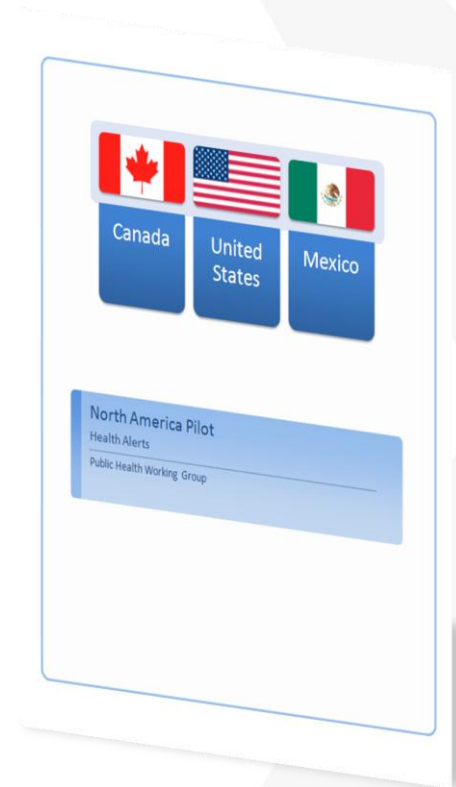
Lead: Mike Nowlin, Chief Architect, US CDC

Technical Demonstration

Standardized exchange of aggregated health alerts from food borne illness between US, Canada, and Mexico

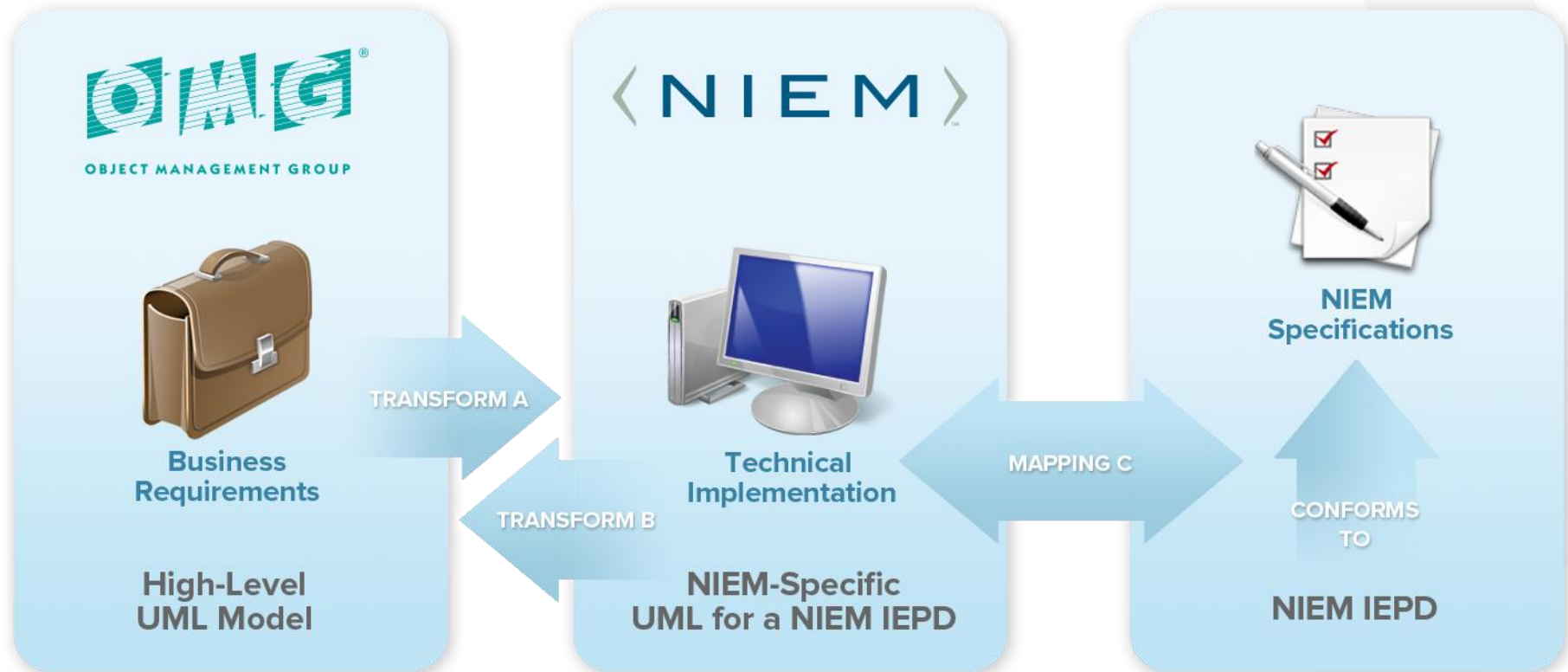
Partners include

| | |
|---------------|--|
| USA | Department of Health and Human Services (HHS) including many groups within Center for Disease Control and Prevention (CDC) |
| Canada | Public Health Agency of Canada (PHAC), Canadian Network for Public Health Intelligence (CNPHI), and Canadian Food Inspection Agency (CFIA) |
| Mexico | Mexico Health Ministry, Mexico Ministry of Public Administration |



RECENT NIEM INNOVATION

COLLABORATIVE INNOVATION ON UML



CURRENT STATUS

The “Revised Submission to the UML Profile for NIEM (NIEM-UML)” was delivered to the Object Management Group (OMG) on Monday, February 20th.

<https://www.niem.gov/industry/Documents/NIEM-UML-Revised-Submission-gov-12-02-01.zip>

OMG approval of the profile is expected in June 2012.

NIEM-UML GOALS

Leverage standards and standards based tools

Reduce complexity and lower the barrier for entry

Facilitate reuse of NIEM models and as a result schemas

Clarity: Ensure that a UML representation of a NIEM model produced by one developer can be interpreted as expected by another.

Completeness: Ensure that a developer can produce a UML representation of any NIEM concept, including semantics, XML Schema structure, and metadata.

Practicality: With minimal effort, a developer can employ the profile in current UML development tools to develop a NIEM model.

CONNECT WITH US



Donna Roy

@NIEMExecDir Washington DC

NIEM connects communities of people who share a common need to exchange information in order to advance their missions. Join our community!

<https://www.niem.gov>



NIEM Outreach

@RockinNIEM USA

#NIEM Outreach - Rockin' NIEM one day at a time!

Whether you attended the 2011 NIEM NTE or not - Watch it all for FREE <http://register.mediasite.com/NTE2011>
<http://www.NIEM.gov>

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< NIEM > National Information Exchange Model (NIEM)

Discussions Members Promotions Jobs Search

Members (2,498)

Sorted by: most relevant



Donna Roy

Experienced technology innovator with data and information focus.

Washington, District Of Columbia | Information Technology and Services | Connections 500+ connections



2011 NIEM NTE's a'la Run like Rocky



Partners



Support from





Final Conference 2012

Day 2 Item 2

NL Experimentation

Wim van der Lingen - Openbaar Ministerie, The Netherlands

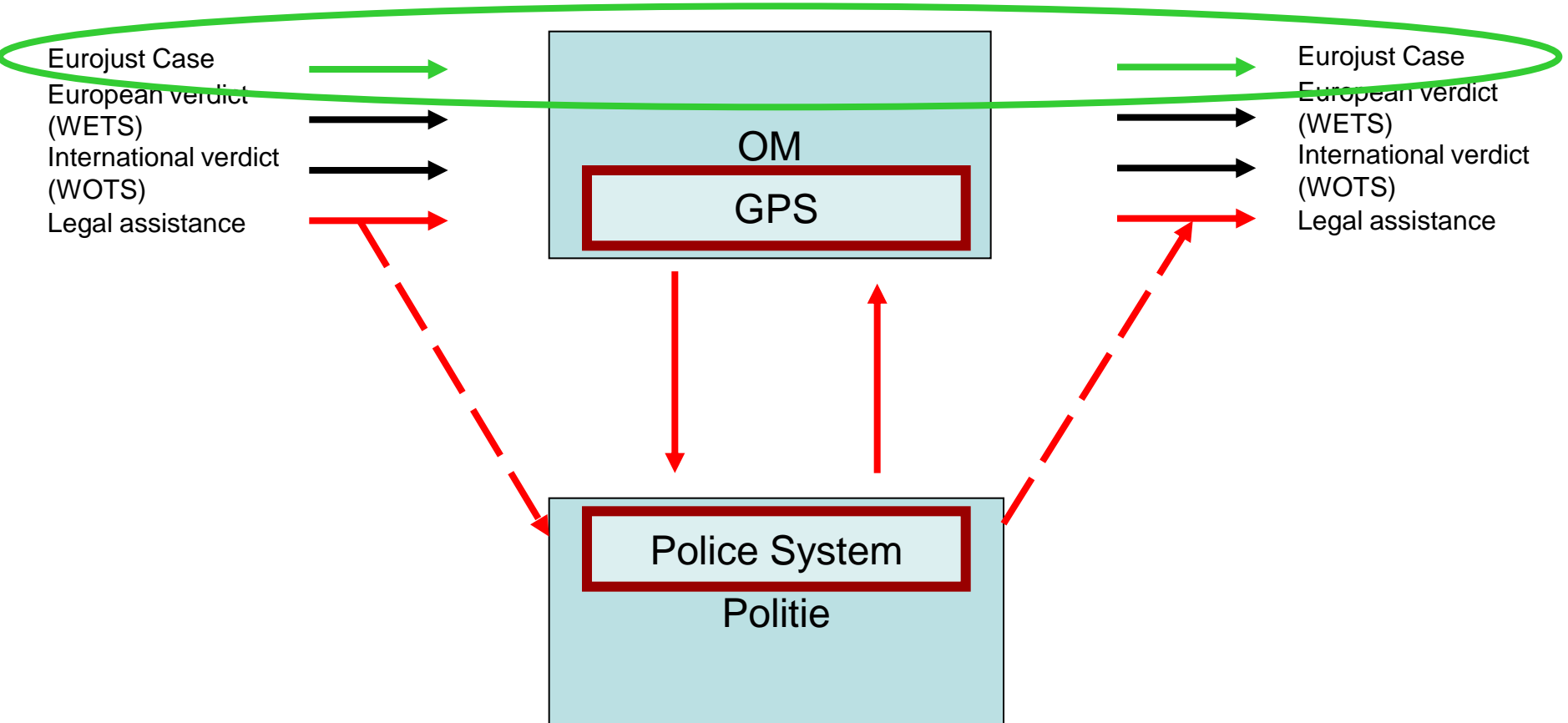


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- Goals of the experimentation
- Choice of interaction solution
- Analysis of the EPOC data standard
- Experiments
- Security aspects

- Experience in XML Investigation Case Data exchange.
- Reusable components for
 - extraction,
 - translation and
 - encryption of the Investigation data.
- All components fit for 'Staatsgeheim-Confidentieel'-classified data.
- Message level encryption. Comparison with Dutch regulations and guidelines.
- Transport: no special components for the test.

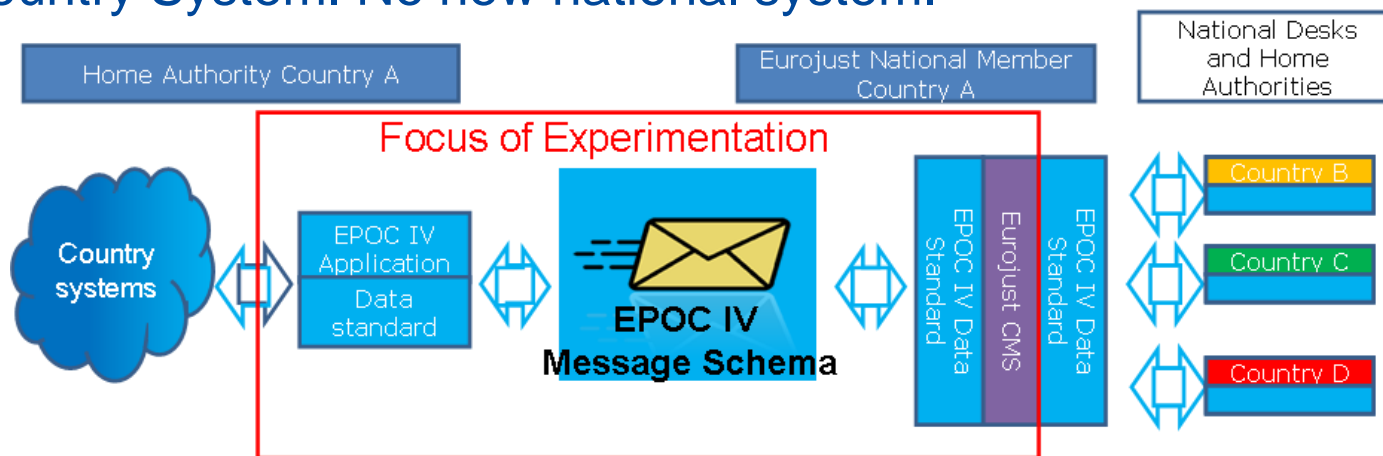
Potential Reuse of EPOC IV Components



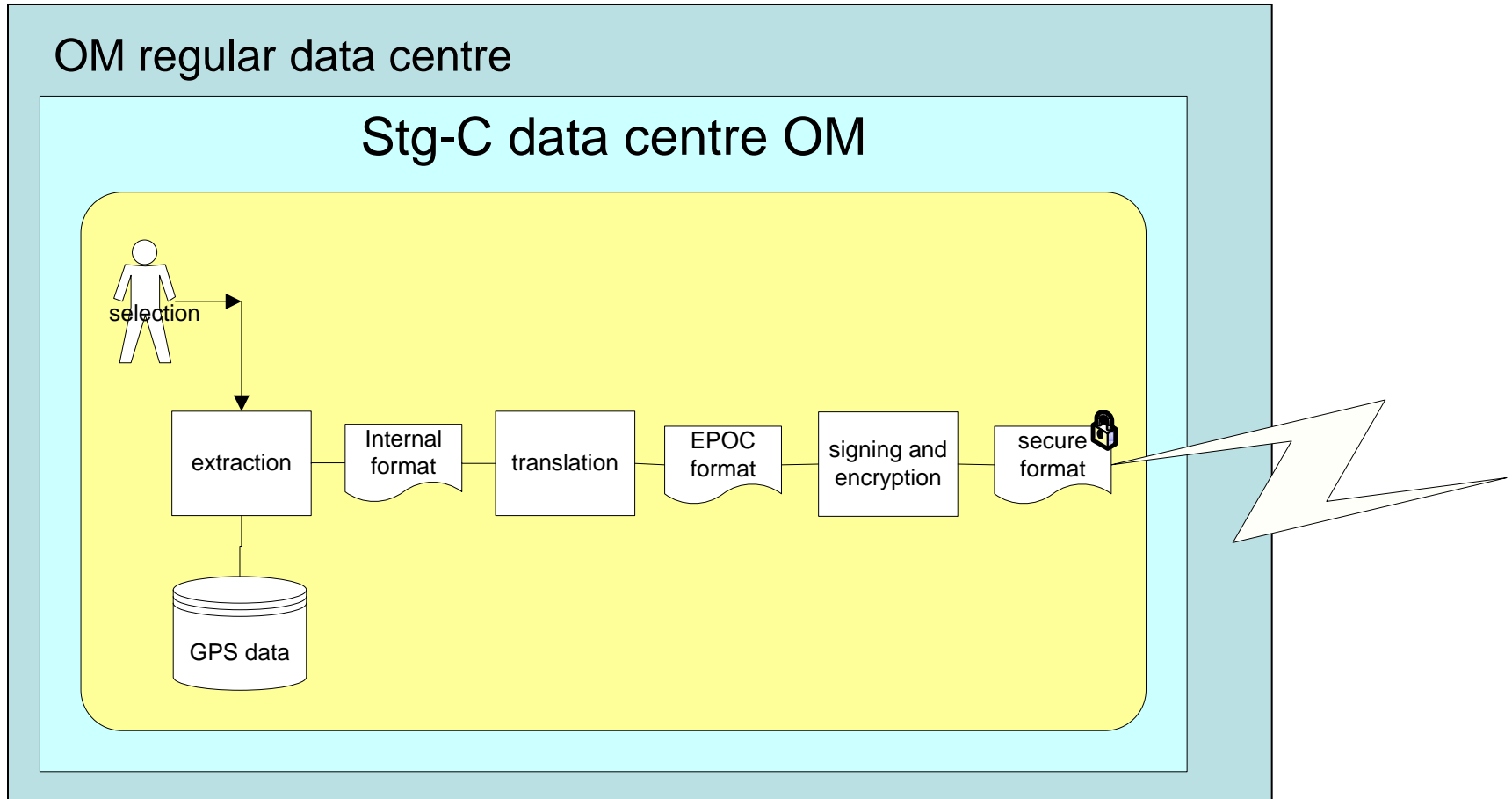
EPOC IV tests electronic data exchange between national systems and Eurojust.

- Option 1: Use of an existing National Case Management system
- Option 2: Introduction of a new National Case Management system for national data collection and Eurojust Communication

The Netherlands uses option 1: the GPS subsystem Investigation is the Country System. No new national system.



Sketch of the Dutch solution



Findings on EPOC IV Data Standard

GPS

- International referential data (ISO country codes) need to be added
- GPS is a system for the prosecution. Some types of data better available in police systems.

Data

- Classification of crimes types and mapping to Dutch classifications needs to be maintained. The Netherlands are obliged to implement mapping to ECRIS classification: reuse is desirable within EPOC data standard.

Additional Data

- Use of validity dates on entities (addresses, laws, etc.)
- SKN: Dutch ID-number of suspects.
- Classification of information.

Findings on data exchange

- Communication succeeded:
 - Data exchange
 - Encryption using industry standard components from different vendors
- Only limited amount of test

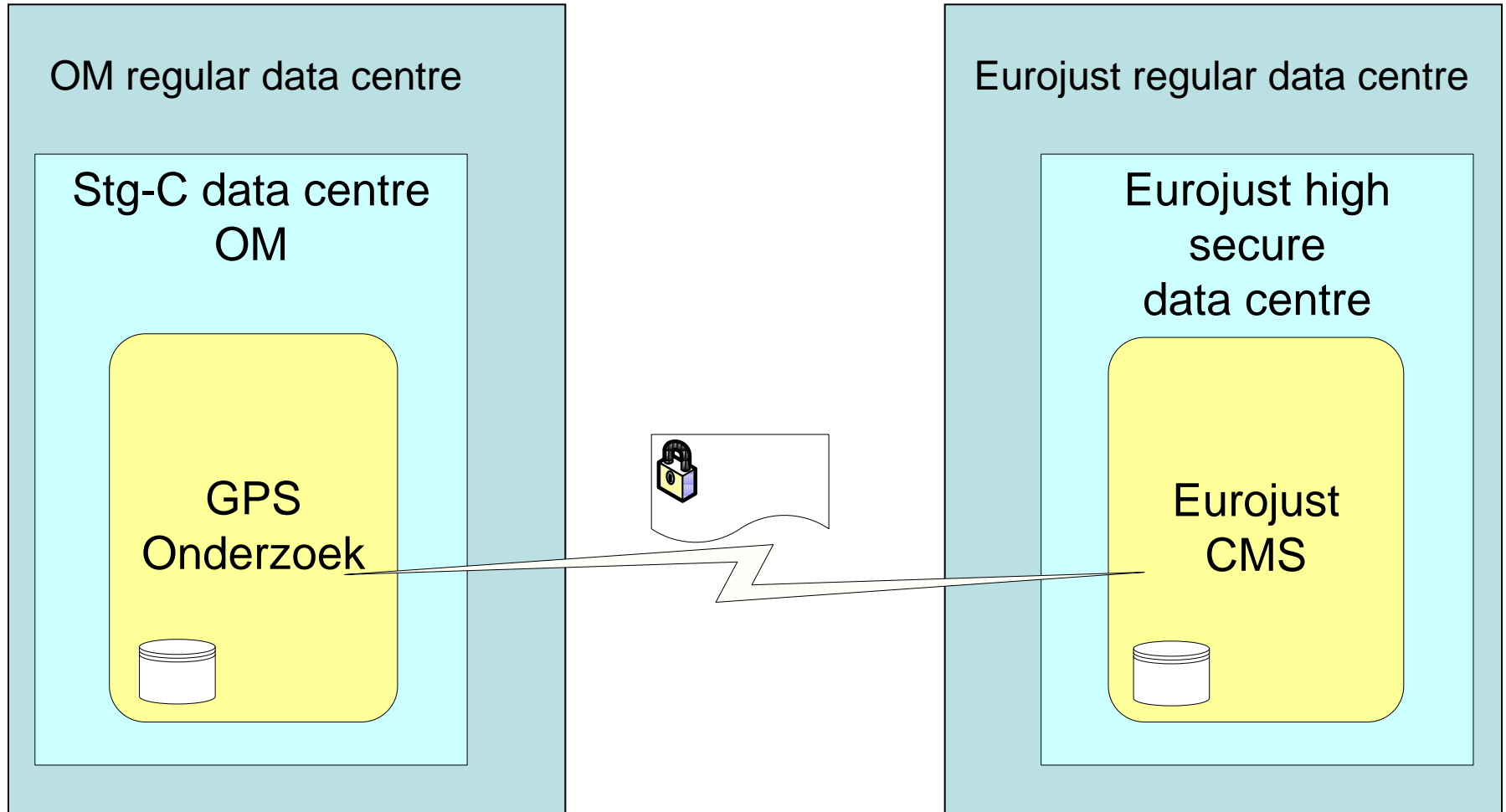
Council's security regulations (2001-264-EC)

Comparison of national security classifications

| EU Classification | Très secret UE/EU top secret | Secret UE | Confidentiel UE | Restreint UE |
|-------------------|---------------------------------|--------------------------|---------------------------------|---------------------------------|
| Bulgaria | Строго секретно | Секретно | Поверително | За служебно ползване |
| Italy | Segretissimo | Segreto | Riservatissimo | Riservato |
| Lithouania | Visiškai slaptai | Slaptai | Konfidencialiai | Riboto naudojimo |
| Slovenia | Strogo tajno | Tajno | Zaupno | Interno |
| The Netherlands | Staatsgeheim – Zeer Geheim | Staatsgeheim - Geheim | Staatsgeheim – Confidentieel | Departementaal Vertrouwelijk |

Security:

OM – Eurojust communication



Findings on Security

- No international agreement on security classification of investigation case data, let alone in the corresponding measures.
- Both The Netherlands and Eurojust work with separated environments for various classifications.
- In The Netherlands only approved components for manual message level encryption for Stg-C (EU Confidential).
- Future solution with automated message level encryption seems feasible. Usability is very important to ensure actual use of solutions.
- The EJ27 project creates a secured network connections between Eurojust and members states. NL uses a dedicated line. This, combined with message level encryption, seems to create an acceptable solution.

- The Netherlands have successfully tested the EPOC IV data standard.
- Reuse of the built components is limited, because:
 - GPS subsystem onderzoek still awaits implementation
 - Various international exchanges use different formats
 - Data standard changing and unequal to Eurojust CMS
- There is potential reuse in the solution for other international communications. Therefore cooperation between Eurojust/EPOC IV and other projects in the environment is welcome.
- Future EPOC projects must address the reconciliation of security classifications and corresponding measures.



Final Conference 2012

Day 2 Item 3

E-Docs for Practitioners



With financial support from Criminal Justice Programme 2008
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- The Challenge
- Main Features of E-Docs
- E-Docs V 1.0
- E-Docs next steps

- Communication among EJ and NA is generally based on document exchange.
- To manage effectively unstructured data contained in the documents, it is necessary to parse, extract and transform them into structured data as the EPOC IV data file
 - This process allows to use management systems like EPOC NAS.
- This scenario could imply duplicated activities: write the documents and create structured data

→ Is there a way to combine this activities?

- A desktop stand-alone tool realised as an add-in to Microsoft Word 2010
- It contains features to easily produce document content AND related structured data at the same time and in a unique artefact
- It produces standard Office Open XML i.e. Word 2007 documents (*.docx) with enclosed the EPOC xml data file
 - The receiver of the document (a person or a system like EPOC NAS) also gets the structured data enclosed in a unique package
- As a future evolution, it could be connected with back-end systems (like EPOC NAS) to directly insert/retrieve data and documents

- Metadata based editor

E-Docs now:

- uses the same configuration information as EPOC NAS
- can replicate the same editing experience that you find in EPOC NAS
- can support data models different to EPOC NAS

- Wizard editing experience

- It's possible to build simple wizards that guide the user to fill in the correct information

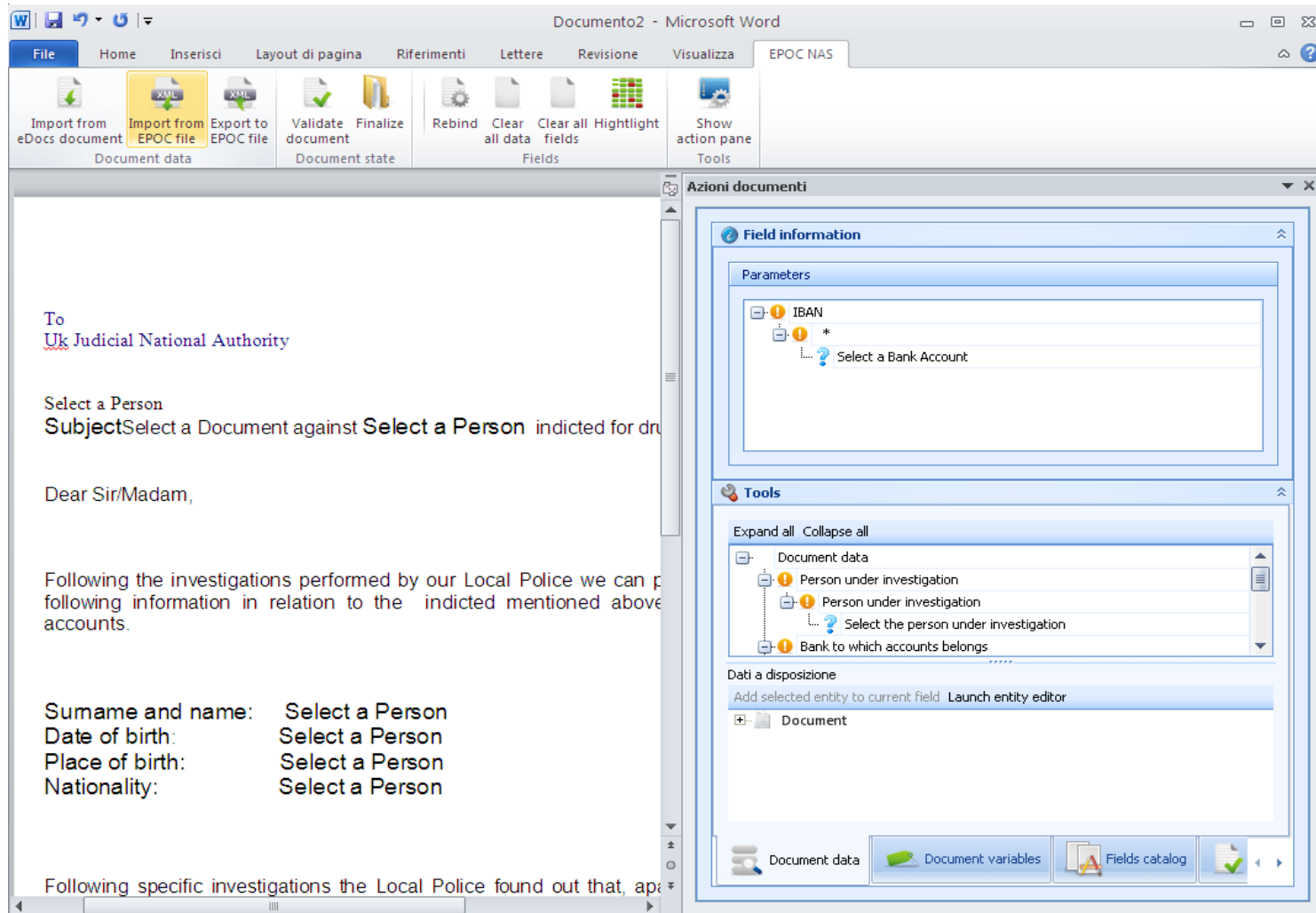
- Extended catalogue syntax to simplify the process of creating new fields

- Multi-language support for the *fields catalogue* and the UI (forms & add-in)
- It's possible to load different catalogues and write documents in different languages

- EPOC NAS import/export pipeline integration
 - Possible to import data directly from E-Docs produced documents
 - Possible to launch E-Docs directly from EPOC NAS and pre-fill the document with the selected data

- Sample use cases:
 - **Fill-in a template**: the user edits a document based on a selected skeleton/template that contains structured text zones to be filled-in in order to finalize the document
 - **Write from scratch**: the user edits a blank document inserting in the document free text and structured text zones or chunks of text freely selected from a catalogue enclosed in the writer/document

Creating an E-Doc through an existing template



The screenshot displays the Microsoft Word interface with the 'EDOC NAS' ribbon active. The ribbon includes buttons for 'Import from eDocs document', 'Import from EPOC file', 'Export to EPOC file', 'Validate document', 'Finalize document', 'Rebind', 'Clear all data', 'Clear all fields', 'Highlight', and 'Show action pane'. The 'Azioni documenti' task pane is open on the right, showing 'Field information' and 'Tools' sections.

Field information

- Parameters
 - IBAN
 - *
 - Select a Bank Account

Tools

Expand all Collapse all

- Document data
 - Person under investigation
 - Person under investigation
 - Select the person under investigation
 - Bank to which accounts belongs

Dati a disposizione

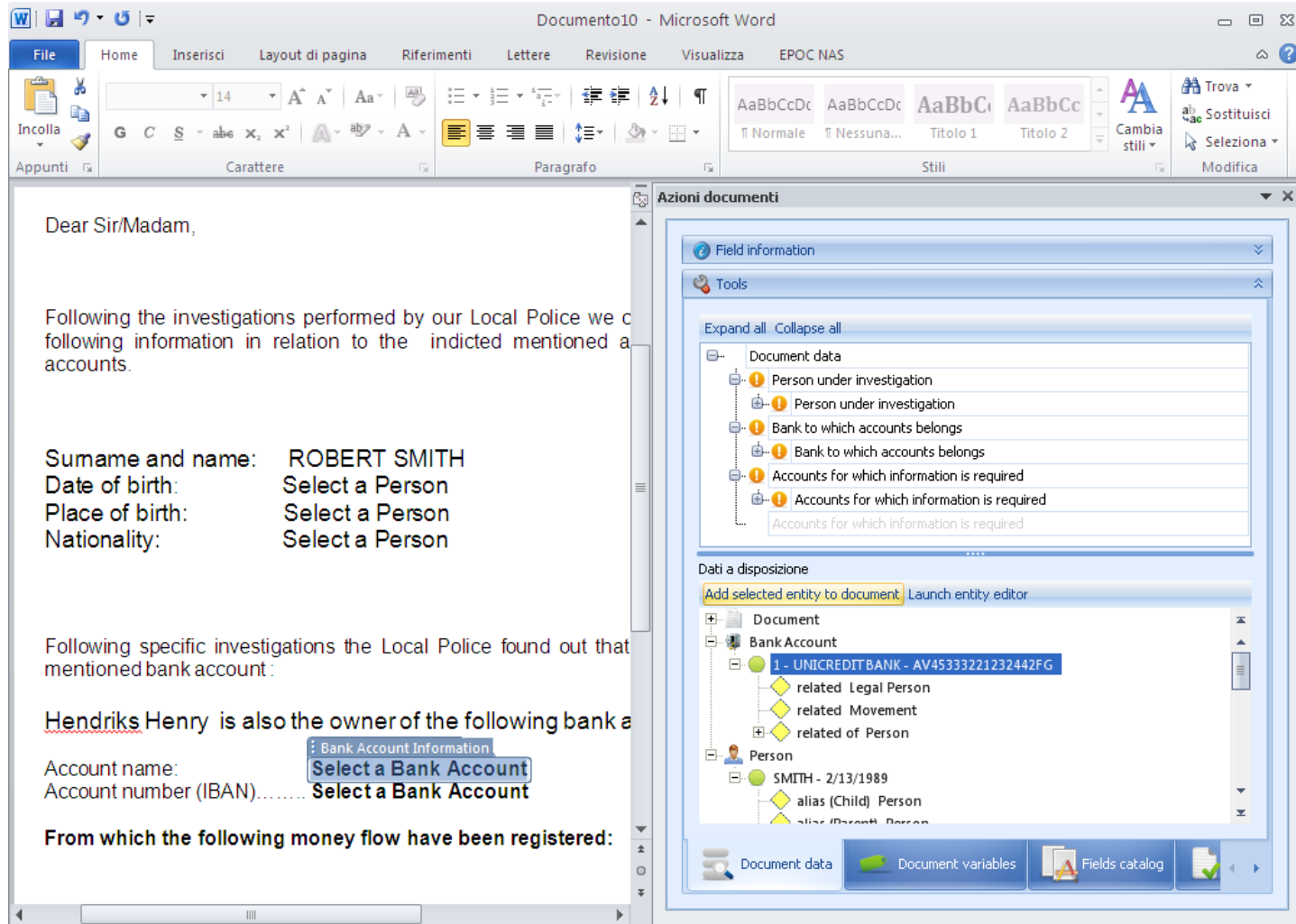
Add selected entity to current field Launch entity editor

Document

Document data Document variables Fields catalog

The main document content shows a template for a letter to the 'Uk Judicial National Authority'. It includes fields for 'To', 'Subject', and 'Dear Sir/Madam'. The body text mentions 'Following the investigations performed by our Local Police we can provide the following information in relation to the indicted mentioned above accounts.' The bottom of the document shows a list of fields to be filled: 'Surname and name: Select a Person', 'Date of birth: Select a Person', 'Place of birth: Select a Person', and 'Nationality: Select a Person'. The footer text reads 'Following specific investigations the Local Police found out that, ap'.

Filling structured data in the document fields



The screenshot displays a Microsoft Word document titled "Documento10 - Microsoft Word" with the "EPOC NAS" ribbon active. The document content includes a salutation, a paragraph about investigations, and several structured data fields for a person and a bank account. The "Azioni documenti" (Document Actions) pane is open on the right, showing a tree view of document data and a list of actions for each entity.

Document Content:

Dear Sir/Madam,

Following the investigations performed by our Local Police we obtained the following information in relation to the indicted mentioned accounts.

Sumame and name: ROBERT SMITH
 Date of birth: Select a Person
 Place of birth: Select a Person
 Nationality: Select a Person

Following specific investigations the Local Police found out that the mentioned bank account:

Hendriks Henry is also the owner of the following bank account:

Account name: Select a Bank Account
 Account number (IBAN): Select a Bank Account

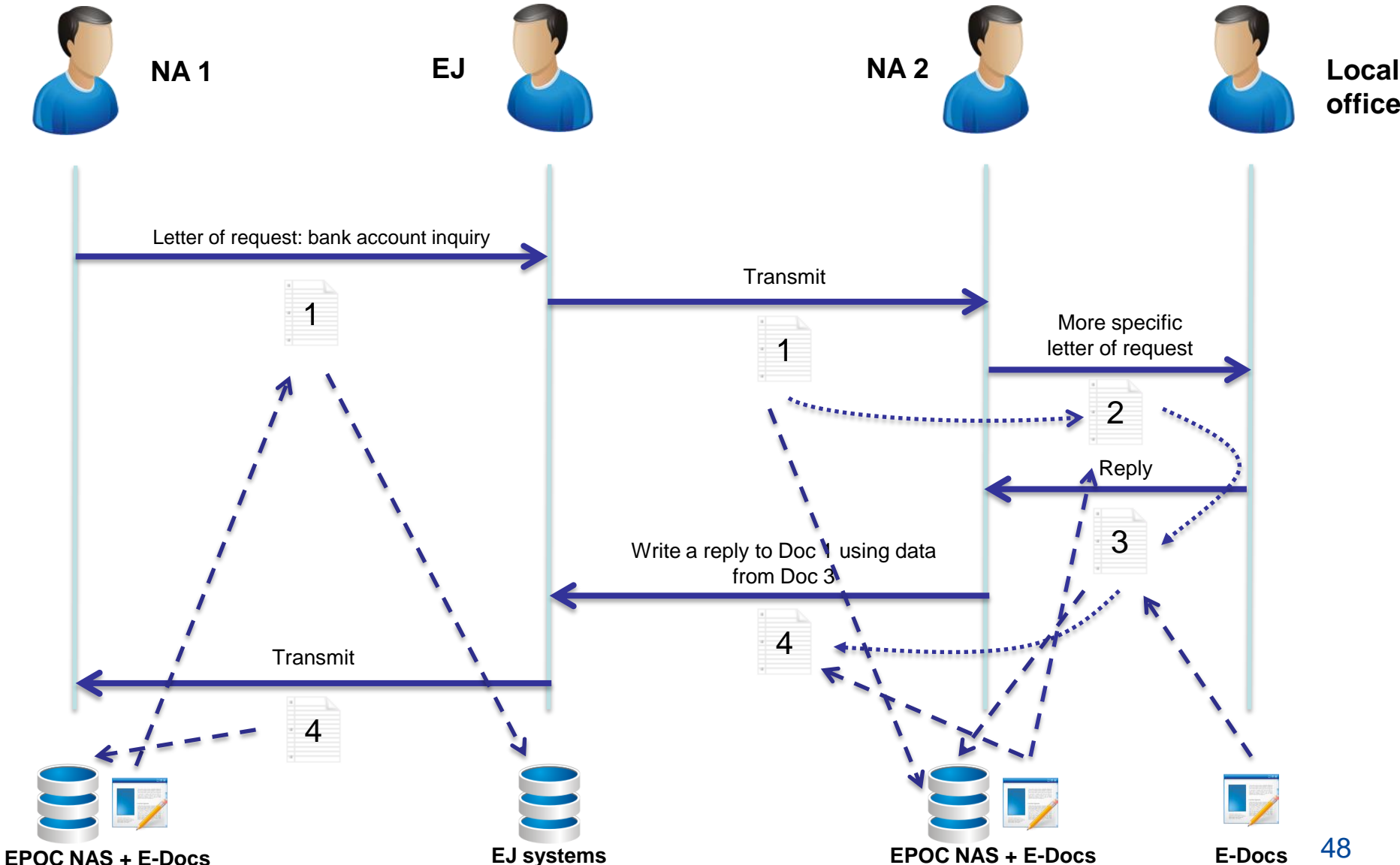
From which the following money flow have been registered:

Azioni documenti (Document Actions) Pane:

- Field information**
 - Tools**
 - Expand all Collapse all
 - Document data
 - Person under investigation
 - Person under investigation
 - Bank to which accounts belongs
 - Bank to which accounts belongs
 - Accounts for which information is required
 - Accounts for which information is required
- Dati a disposizione**
 - Add selected entity to document Launch entity editor
 - Document
 - Bank Account
 - 1 - UNICREDIT BANK - AV45333221232442FG
 - related Legal Person
 - related Movement
 - related of Person
 - Person
 - SMITH - 2/13/1989
 - alias (Child) Person
 - alias (Parent) Person

- EPOC NAS integration
 - EPOC NAS research functions integration
- Templates availability
 - Standard template library to support common workflows

E-Docs Show Case





Final Conference 2012

Day 2 Item 4

Eurojust Decision ICT Projects



Kaltekis Lefteris – EJ ICT Project Officer



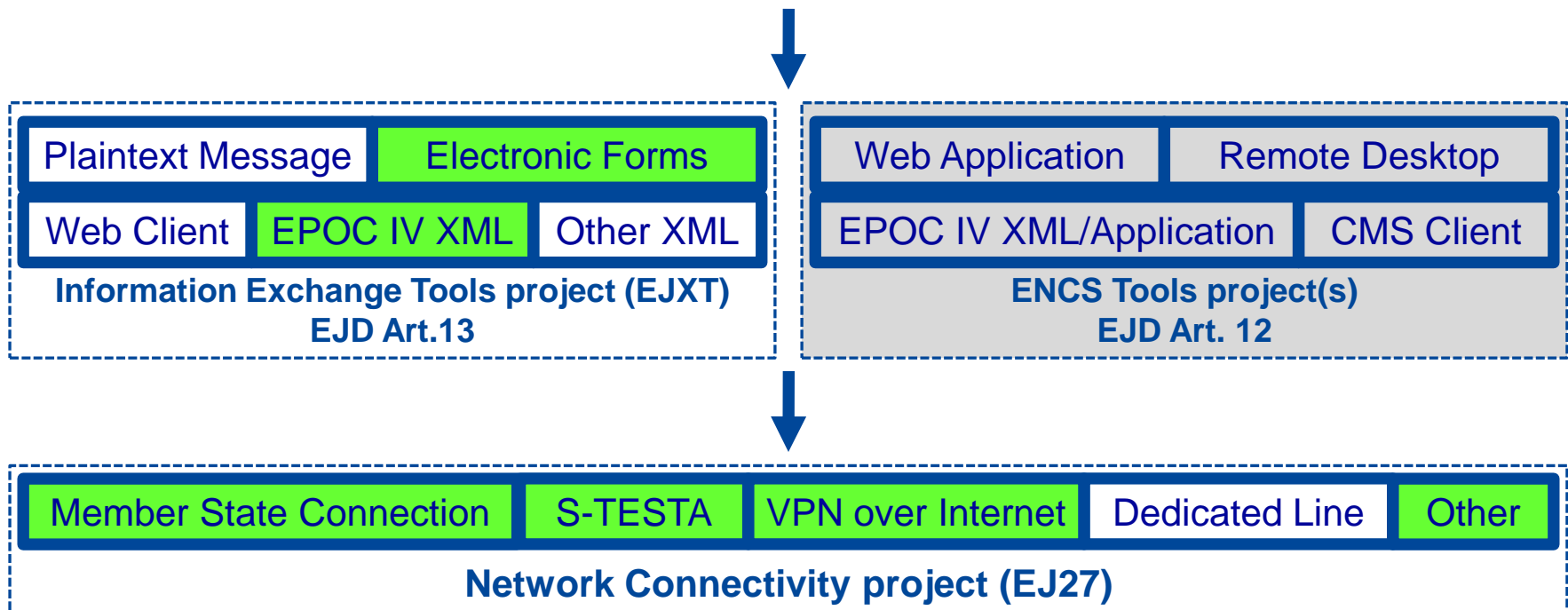
With financial support from Criminal Justice Programme 2008
European Commission – Directorate-General Justice, Freedom and Security

- Background
- EJ ICT Approach for EJD
- Tools for Art. 13
- Next Steps

- Revised Eurojust Decision (EJD)
 - Revision of the Eurojust (EJ) legal framework, to strengthen EJ
 - Entered into force on 4 June 2009
 - EJD Implementation ongoing at EJ and at Member States (MS)
- EJD articles with impact on EPOC IV project:
 - Art. 12: MS to set-up an ENCS of which the members shall / may be “connected” to the EJ CMS
 - Art. 13: New requirements for EJ-MS information exchange
 - Art. 13^a: Information provided by EJ to national authorities
 - Art. 15: New requirements for handling personal data in the CMS
 - Art. 16, 16a and 16b: New security model for the CMS

- Research under EPOC IV *versus* compliance with the revised EJD
- 
- A large blue downward-pointing arrow indicating a flow from the first point to the second.
- Two parallel routes with one common destination:
 - Improve international judicial cooperation, so as to support the fight against serious and organised crime
- 
- A large blue downward-pointing arrow indicating a flow from the second point to the third.
- EPOC IV project results were considered and utilised in implementing the ICT requirements of the revised EJD

- Work together with the MS to identify the networks and tools to support the implementation of EJD Art.12 and 13



- The implemented forms for the information exchange under EJD Art.13 are the first proof-of-concept for EPOC IV results
 - Electronic (PDF) form using the EPOC IV data standard
 - Created in all EU languages
 - Release 1.0 provided to EJ National Desks (NDs) in June 2011
 - Release 1.1, with technical fixes, sent to NDs in October 2011
 - Release 2.0 under development, to be sent to NDs in April 2012

Tools for Art.13 (2)



To be submitted to your National Desk at Eurojust AND re-submitted whenever the information contained needs to be updated.

The fields in gray color are optional fields.

A) GENERAL INFORMATION

1. Originating Member State

2. National file reference number(s)

3. File reference number(s) in other countries concerned

4. Responsible National Authority/Person

5. Has the assistance of Eurojust already been requested?

☐ YES

☐ NO






6. Do you intend to attach a file?

☐ YES

☐ NO

B) SPECIFIC INFORMATION

(click on the relevant item to expand)

-  **Joint Investigation Teams - Article 13(5)**
-  **Cases of particular gravity - Article 13(6)**
-  **Cases involving a (potential) conflict of jurisdiction - Article 13(7)(a)**
-  **Controlled deliveries - Article 13(7)(b)**
-  **Repeated difficulties/refusals in the execution of requests for mutual legal assistance/mutual recognition instruments - Article 13(7)(c)**

Thank you for your time and cooperation.

If you wish to have a print-version of this form, simply click on the "Print" button below and follow the instructions of the print menu.

We kindly request to save this document, by using the button "Save" to save locally the form, then sent it to your National Desk through a secure email. If you have the possibility, the Secure Member state connection is recommended. The saved form and other files should be attached to the email.

Save

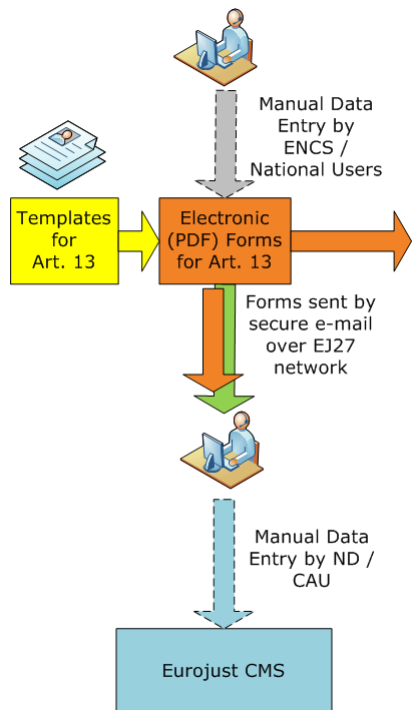
Print

- Benefits from using the EPOC IV standard
 - Facilitate judicial data exchanges between EJ and MS, between 2 MS's or even within the same MS
 - Automate relevant business processes/workflows on EJ or MS's

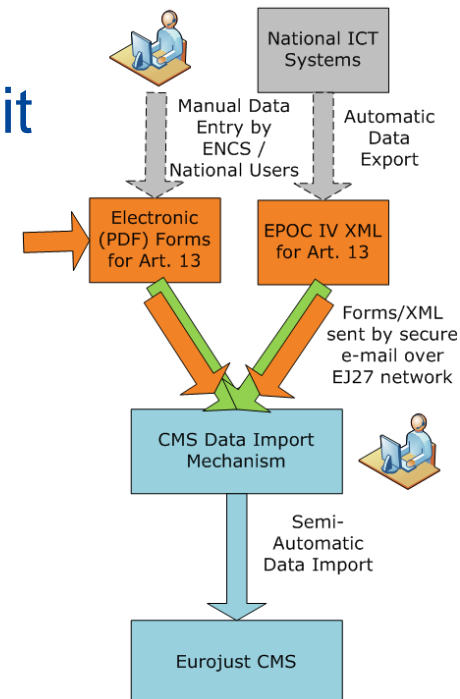
```
<?xml version="1.0" encoding="UTF-8" ?>
- <na:PayloadHeader xmlns:na="http://tempuri.org/ExchangeSchema.xsd">
- <naex:PayloadHeader xmlns:naex="http://tempuri.org/ExtensionSchema.xsd">
  <naex:Art13FormVersion>2.0.10</naex:Art13FormVersion>
- <naex:FileOriginatingCaseAuthority>
- <naex:PayloadHeaderFileOriginatingAuthorityOfficeAddress>
  - <nc:StructuredAddress xmlns:nc="http://niem.gov/niem/niem-core/2.0">
    - <nc:LocationStreet>
      <nc:StreetFullText xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:nil="true" />
    </nc:LocationStreet>
    <nc:LocationCityName xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:nil="true" />
    </nc:StructuredAddress>
  </naex:PayloadHeaderFileOriginatingAuthorityOfficeAddress>
</naex:FileOriginatingCaseAuthority>
  <naex:FileOriginatingInformationAuthority />
</naex:PayloadHeader>
- <na:JITArticle13-5>
- <naex:JointInvestigationTeams-Article13-5 xmlns:naex="http://tempuri.org/ExtensionSchema.xsd">
```

- Moving towards an automation of Art.13 data workflows
 - Release 3.3 of CMS, supporting semi-automatic import of release 2.0 of the form, to be delivered by May 2012
 - Options for further automation of Art.13 data exchange workflows to be investigated (e.g. XML-web services solutions)

How
it is
now?



How it
will be?



- Further automation of Art.13 data exchange workflows
 - Automatic export of information from national ICT systems
 - Increased automation in the EJ workflow and the CMS import mechanism
- Full CMS-EPOC IV integration (not only for Art.13 data)
- Implementation of EPOC IV NAS as international component of ENCS ICT system in MS's

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Day 2 Item 5

Searching for Common Data Attributes in Europe

Greg Potterton – Technical Expert (Eurojust)



With financial support from Criminal Justice Programme 2008
European Commission – Directorate-General Justice, Freedom and Security

- Data Standards included in the Analysis
- Big/Small picture - Specific Communications
- Common Data Items (Lack thereof)
 - Data Items statistics for Specific Communications
 - Entities and Relationships – Differences between systems
- Use of NIEM - Semantics and Structure
- ISA Programme Action 1.1 Core Vocabularies
- Still Challenges that lay ahead

- “A **standard data model** or industry standard data model (ISDM) is a data model that is widely applied in some industry, and shared amongst competitors to some degree.” - *Wikipedia*
- “When in use, they enable easier and faster information sharing because heterogeneous organizations have a standard vocabulary and pre-negotiated semantics, format, and quality standards for exchanged data.” - *Wikipedia*
- The problem when selecting a Data Standard, is that there are so many to choose from
- We are suffering from a case of too many Data Standards and no interoperability

EPOC IV Objective 1 – Data Standards

- Objective 1 - Drafting of a data format to exchange structured data ...
 - Research to identify data formats and ongoing initiatives dealing with the exchange of information in the police and justice domain.
- Data Standards mapped during EPOC IV research
 - (16 including EJ CMS, EPOC III+, BG, CZ, FR, IT, LT, NLx2, PT, SEMIC.EU Person Core, Europol AWF, Schengen Sirene, EAW, UN/CEFACT, Stork)

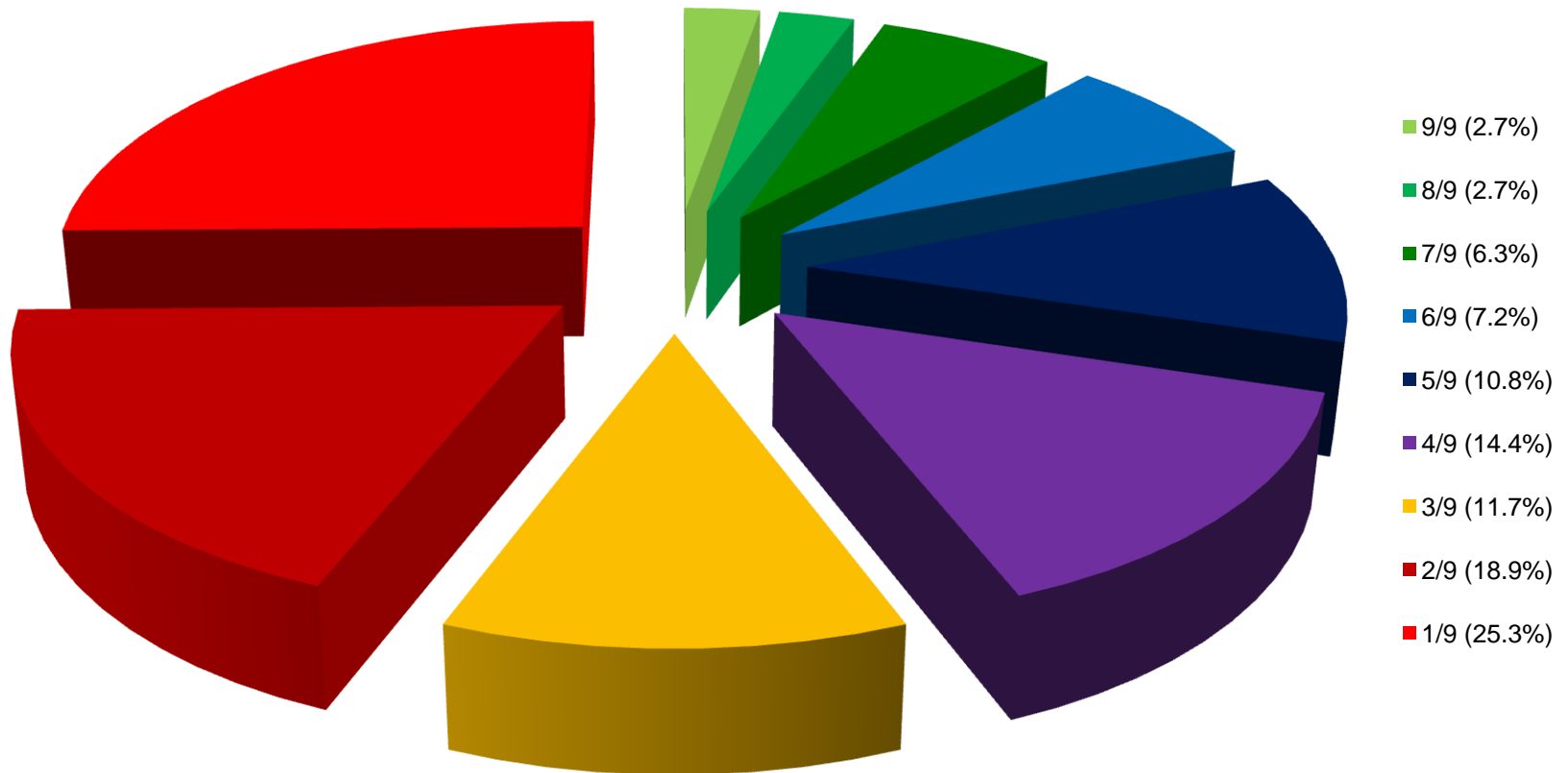
- EPOC IV total Data Items = 1113 (excluding relationships)
- Big Wide Mapped Picture ...
to Small Specific Communication Pictures
- Comm_to_EJ_CMS. Data Items = 128 (excl. additional info)
- Article13 comm. Data Items = 82

Common Data Items (Lack thereof)

- Consider the relevant Judicial Data Dictionaries incorporated into EPOC (9)
 - **Bulgaria** (BG) - Unified Information System (UIS)
 - **Czech Republic** (CZ) - ISYZ (Information system of public prosecutors)
 - **France** (FR) - CASSIOPEE
 - **Italy** (IT) - DNA Anti Mafia system [extract]
 - **Lithuania** (LT) - IPS (Information Prosecutor System) [extract]
 - **Netherlands** (NL) – GPS (Geïntegreerd ProcesSysteem)
 - **Portugal** (PT) – AGIC (Aplicação de Gestão de Inquérito Crime)
 - **Eurojust** - Existing EJ CMS
 - **Eurojust** - Decision Article 13

Common Data Items (Lack thereof)

**Data Items input into Comms_to_EJ_CMS = 111
(excluding additional info & Communication specific items)**



Common Data Items (Lack thereof)

- Most Common Data Items 9/9
 - PersonBirthDate; LegalPersonRegistrationNumber; LegalPersonName;
- Most Common Data Items 8/9
 - PersonSurname; PersonGivenName; PersonGenderCode
- Most Common Data Items 7/9
 - PersonSystemIdentifier; PersonBirthLocationCityName; PersonBirthLocationCountryIdentifier; IdentificationDocumentCode; LegalPersonSystemIdentifier; LocationAddressLine1; CrimeDescription

- **NIEM Semantics**

- Semantic definitions for EPOC IV attributes based on NIEM v2.1 where possible
- Otherwise use of NIEM Extension principle
- Making use of the maturity of NIEM Semantics

- **NIEM Structure**

- NIEM provides a structure around which you can build communications
- NIEM provides tools by which you can validate the structure of a communications
- Comm_to_EJ_CMS IEPD is 100% compliant to the NIEM ConTesA Conformance Report.

- <https://www.niem.gov>

Helping Europe move towards a digital single market

- European Commission's ISA (Interoperability Solutions for European Public Administrations) programme
- "... would mean that information can be exchanged easily and swiftly across borders ..."
- "...helping citizens and businesses to fully benefit from the freedoms of the single market."
- Action 1.1 looking at Core Vocabularies. Start with:
 - Core Person
 - Core Location
 - Core Business
- Public review of Cores just finished
- <http://ec.europa.eu/isa/>

Challenges that lay ahead for European Semantic interoperability

- Many Interoperability projects running in Europe
 - Judicial alone = EPOC IV, eCodex, UMF2, ECRIS, etc
- Need to borrow from and build on each others successes
- Must not become victims of the “Not built here” syndrome
- Allow local/regional initiatives
- Support centralised initiatives
- *Creating European interoperability one step at a time*

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Final Conference 2012

Day 2 Item 6

E-Docs and Import/Export component



With financial support from Criminal Justice Programme 2008
European Commission – Directorate-General Justice, Freedom and Security

EPOC without NAS

- Low impact scenarios

Import/Export pipeline

- Overview
- Deliverables

E-Docs

- Overview

How to manage a low impact required scenario

EPOC WITHOUT NAS

- The scenario where it's not possible (or it's not advisable) to install a new complex system.
 - Architectural and/or technical constraints
 - Organizational issues
 - Laws
- How it's possible to use EPOC IV deliverables?
 - Use the data standard implementing the existing systems (maybe using the import/export pipeline components)
 - Use E-Docs

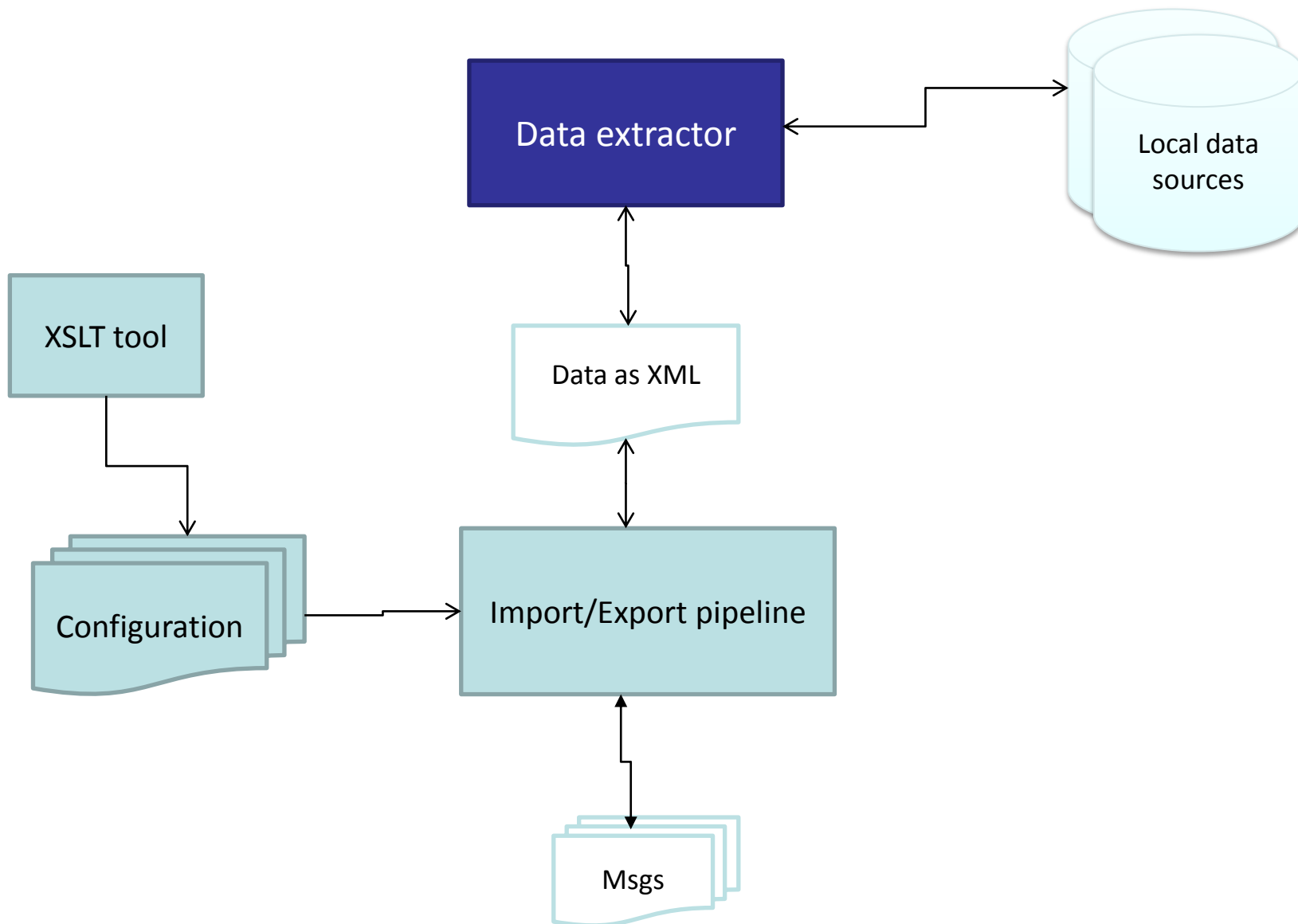
Implementing existing systems

IMPORT/EXPORT PIPELINE COMPONENTS

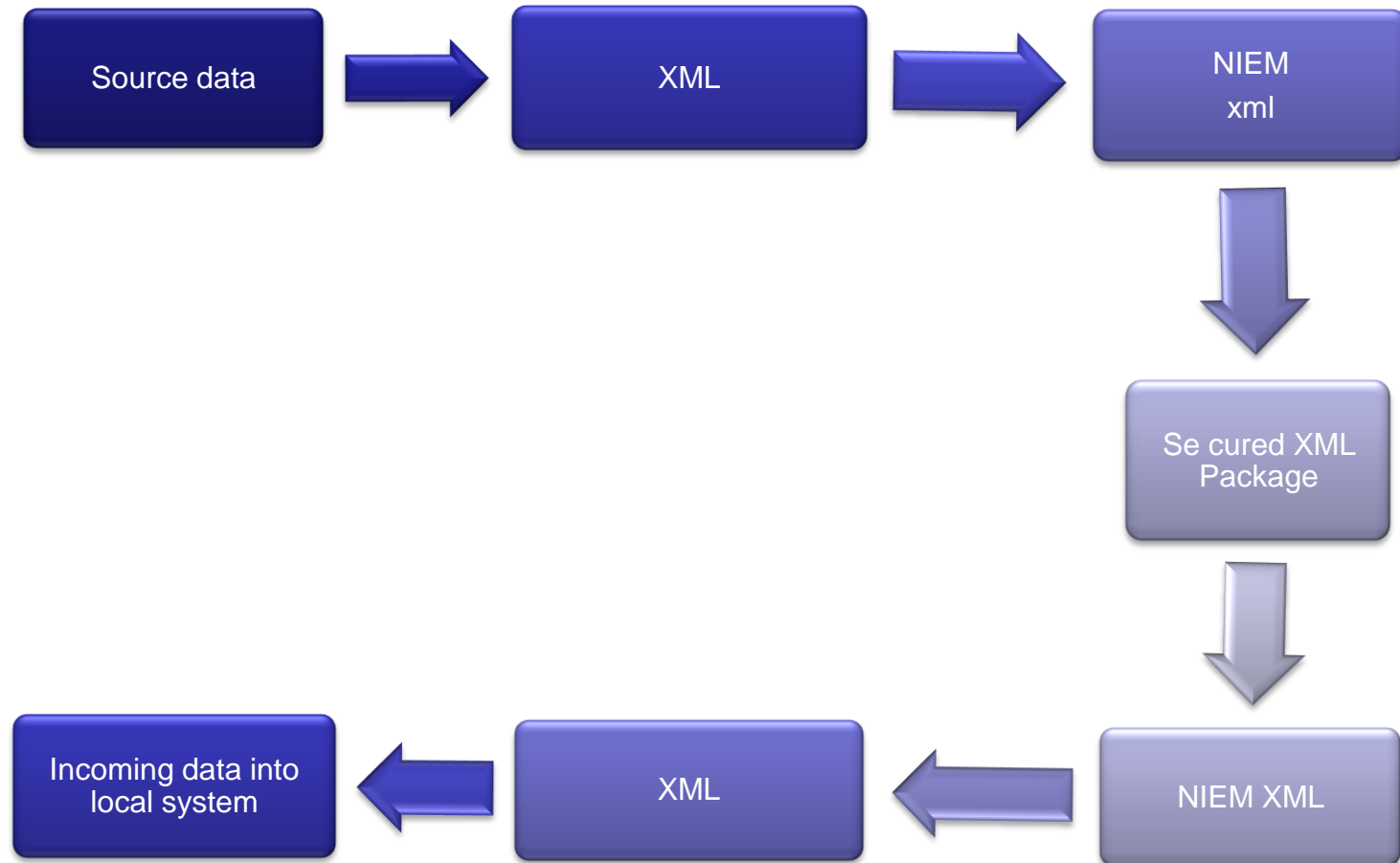
Import/Export pipeline components

- EPOC NAS uses separate components to package exchanged messages
 - It's possible to reuse the components (if the technology platform is compatible) or use them as guidelines to develop the same functionalities on the desired platform.

The Import/Export pipeline



Communication data flow



Import/Export pipeline components

- Available as .NET set of assemblies with source code
- It's possible to reuse:
 - Software components
 - XSLT transformations
 - The architecture

Writing documents and EPOC messages

E-DOCS

- E-Docs

- It's a desktop stand-alone tool realised as add-in to Microsoft Word 2010
- It contains features to easily produce document content AND related structured data at the same time and in a unique artifact
- It produces standard Office Open XML (ECMA-376, ISO/IEC 29500 standard) i.e. Word 2007 documents (*.docx) with enclosed the EPOC xml data file
- Who receives the document (a person or a system like EPOC NAS) gets also the structured data enclosed in a unique package
- As a future evolution, it could be connected with back-end systems (like EPOC NAS) to directly insert/retrieve data and documents

Why E-Docs?

- E-Docs allows you to produce EPOC IV messages without installing EPOC NAS
 - It can be used where it's possible to use Microsoft Word
- Communication among EJ and NA is generally based on documents exchange
 - E-Docs is able to produce EPOC IV messages while supporting the common activity of writing documents
- It produces 'structured documents': the document contains xml data that can be extracted and parsed by automated systems

- Microsoft OBA (Office Business Application): application built as Office extensions
- E-Docs uses three pillars
 - OpenXML format
 - Microsoft Office Application Add-Ins layer
 - Word Content Controls technology

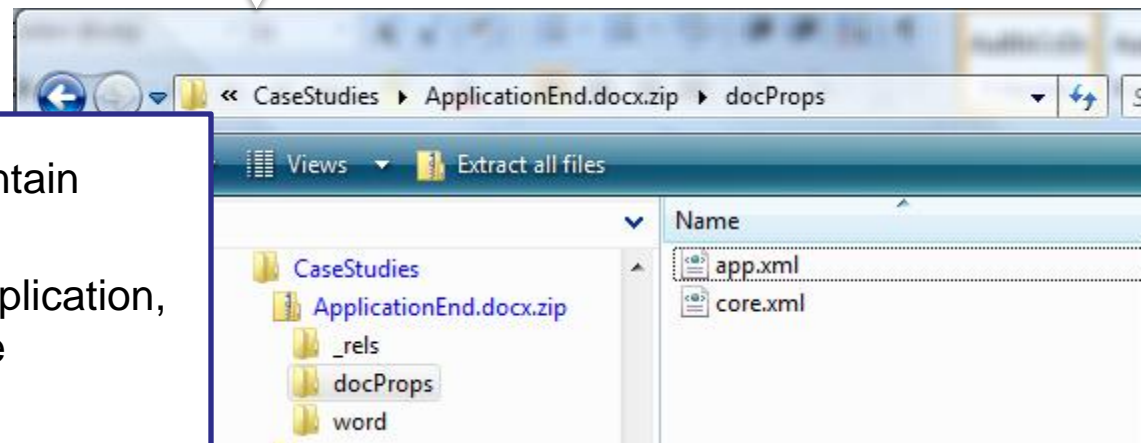
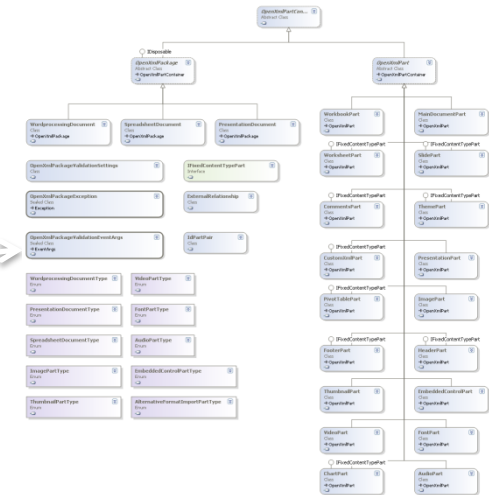
Office System 2007 use new standard format “**Open XML Format**” (ratified as Ecma 376). Key benefits are:

- **Compact file format.** Documents are automatically compressed — up to 75 percent smaller in some cases.
- **Improved damaged file recovery.** Modular data storage enables files to be opened even if a component within the file is damaged — a chart or table, for example.
- **Easier integration.** Developers have direct access to specific contents within the file, like charts, comments, and document metadata.
- **Transparency and improved information security.** Documents can be shared with increased confidentiality because personally identifiable information and business sensitive information — user names, comments, tracked changes, file paths — can be easily identified and removed.
- **Compatibility.** By installing a simple update, users of Microsoft Office 2000, Microsoft Office XP, and Office 2003 Editions can open, edit, and save documents in one of the Ecma Office Open XML File Formats

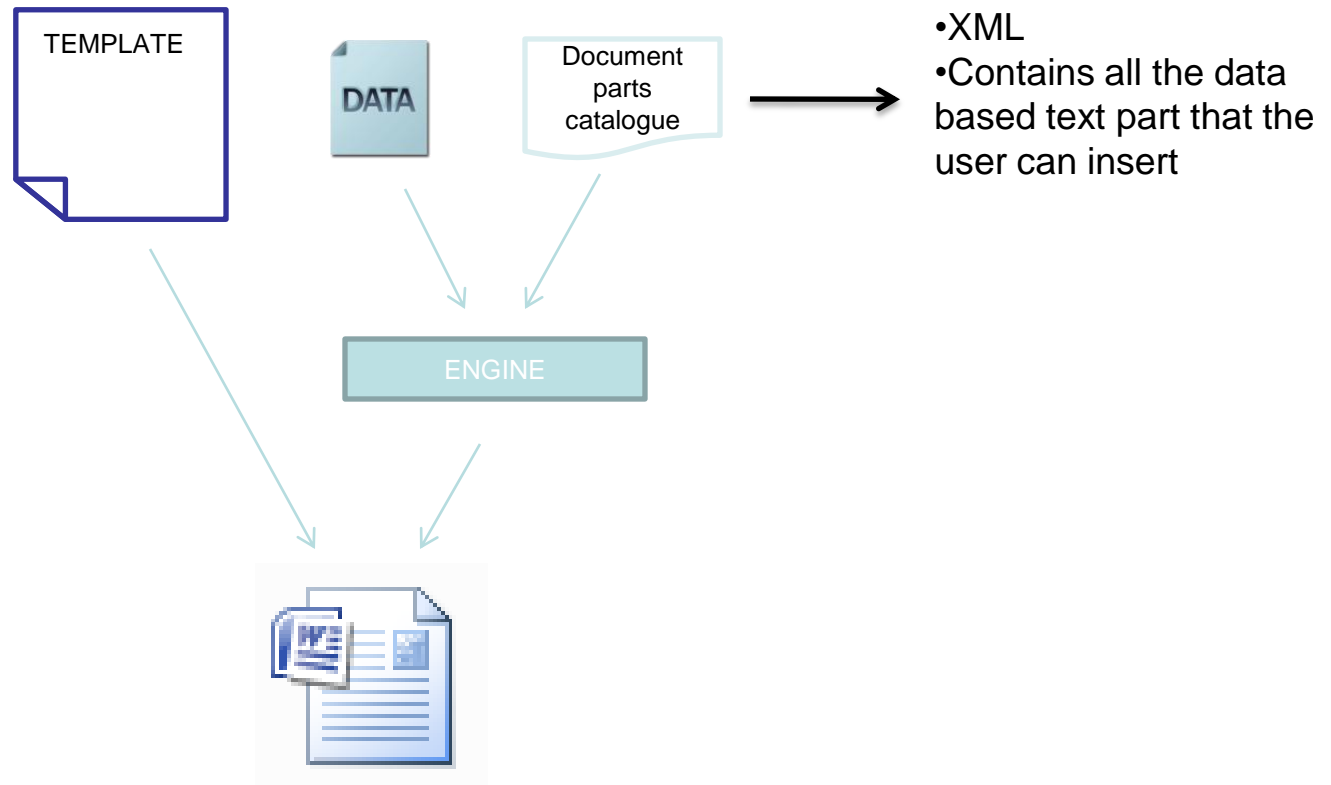


OpenXml Format documents can contain custom xml data.

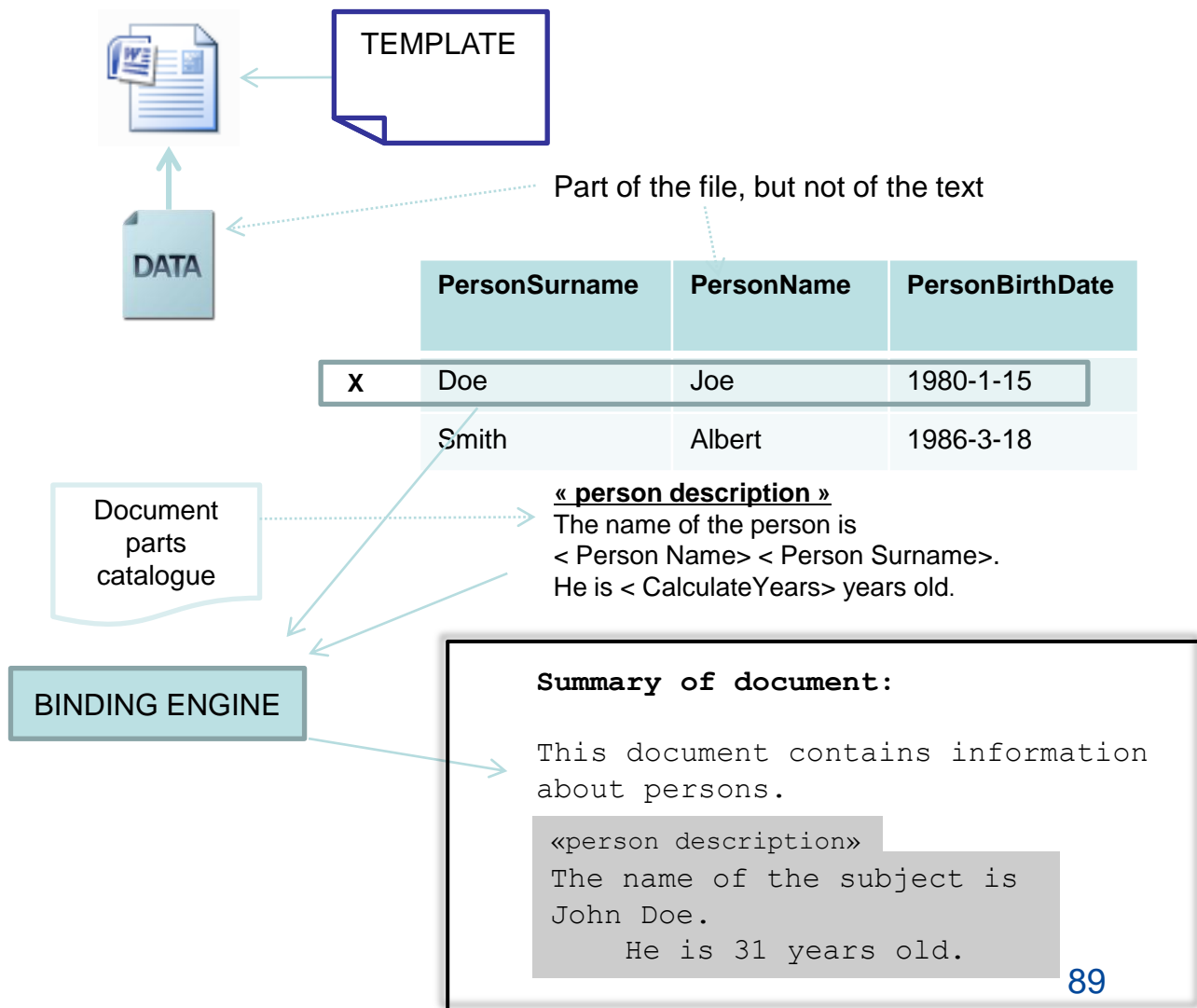
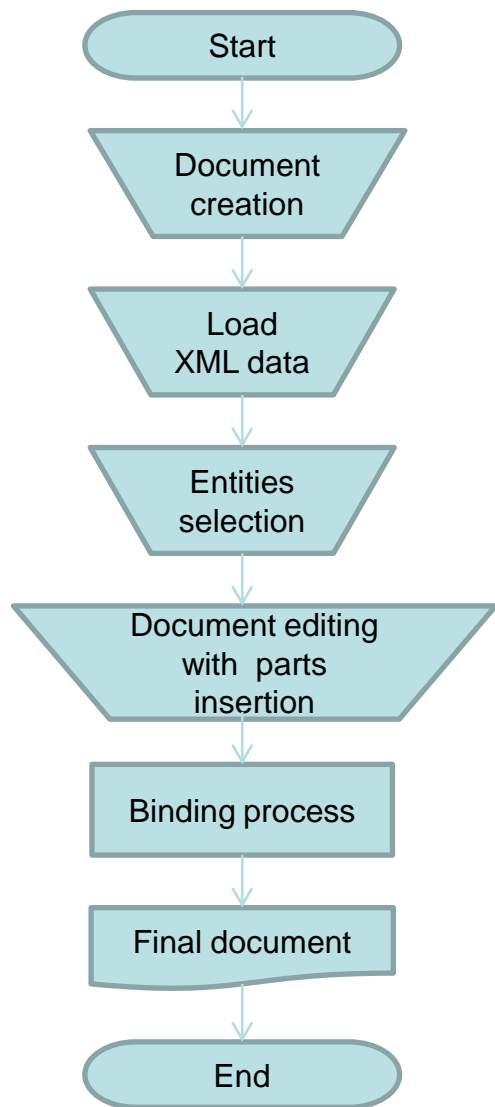
It is possible, for a Office Business Application, to embed custom data directly into the document itself.



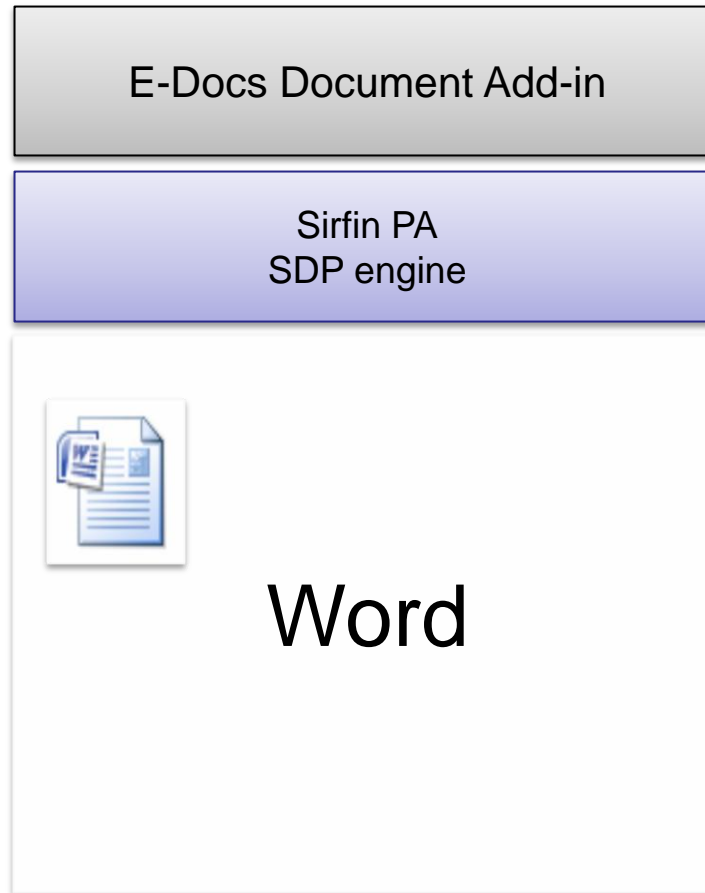
E-Docs: tech overview



E-Docs: tech overview



E-Docs: tech overview



- Metadata based editor.

E-Docs:

- Contains a forms system that is able to edit all the data set of EJ2010 decision
- uses the same configuration information of EPOC NAS
- replicate the same editing experience that you find in EPOC NAS
- can support different data models as EPOC NAS

- Wizard editing experience

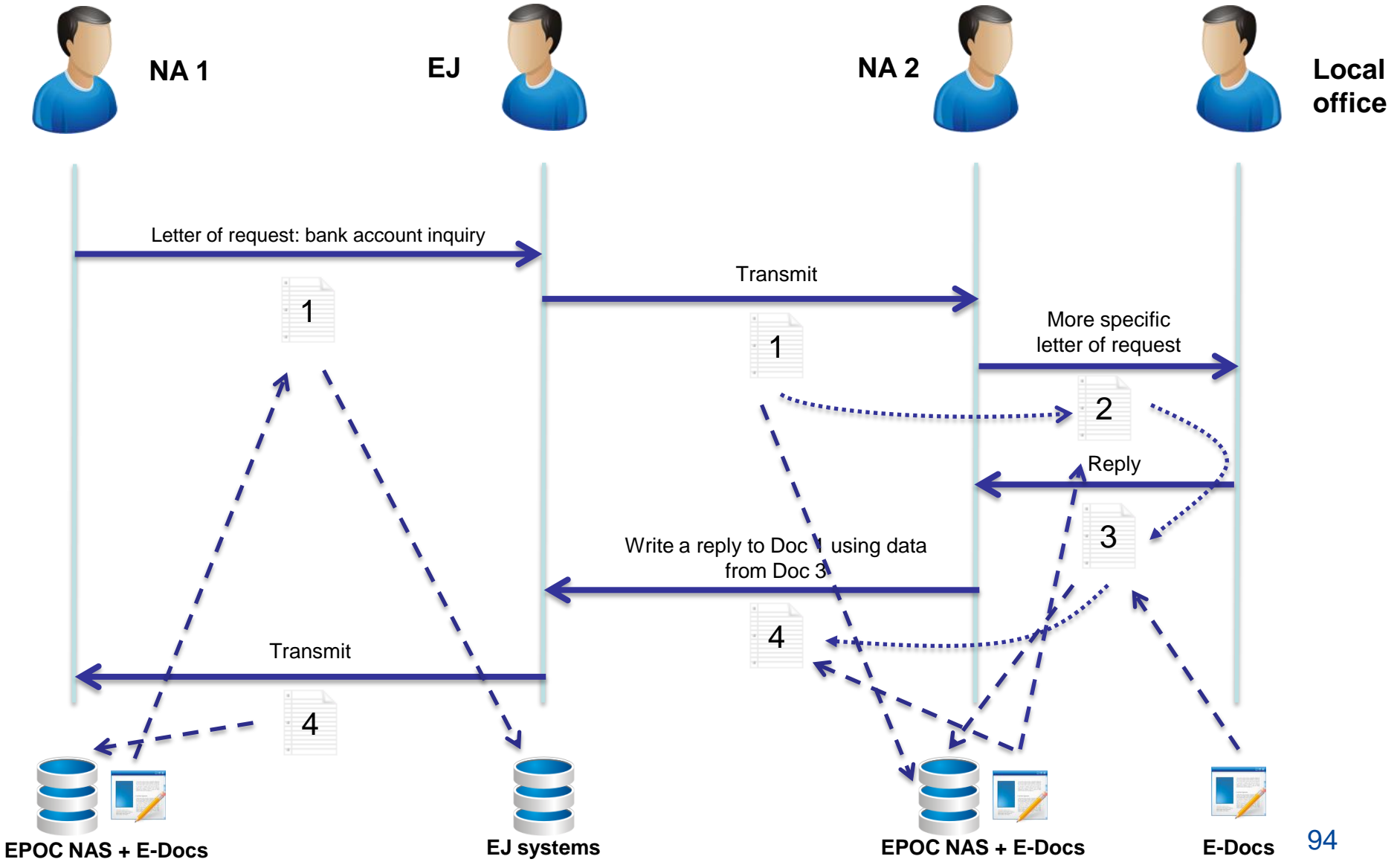
- It's possible to build simple wizards that guides the user to fill the correct information

- Localization

- Multi-language support for the *fields catalogue* and the UI (forms & add-in)
- It's possible to load different catalogues and write documents in different languages

- EPOC NAS integration
 - EPOC NAS import/export pipeline integration
 - It's possible to import data directly from E-Docs produced documents
 - It's possible to launch E-Docs directly from EPOC NAS and pre-fill the document with the selected data

E-Docs use case



- E-Docs allows the creation of custom templates
 - It's possible to create custom templates to support specific organisational processes (using the same set of EPOC IV data)
 - With the same add-in, it's possible to create several templates and fit the local organisational process needs
- E-Docs allows the customization of the text generation
 - It's possible to customise the parts catalogue to adapt to the way the text is rendered to local context specific constraint

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Final Conference 2012

Day 2 Item 7

Article 13 form technical presentation



David Bosque – Eurojust



With financial support from Criminal Justice Programme 2008
European Commission – Directorate-General Justice, Freedom and Security

- Background
- Objectives
- Solution
- Integration with Eurojust's CMS
- Final workflow
- Future work

- Revised Eurojust Decision (EJD)
 - Revision of the Eurojust (EJ) legal framework, to strengthen EJ
 - EJD Implementation ongoing at EJ and at Member States (MS)
 - Art. 13: New requirements for EJ-MS information exchange
 - Certain types of information have to be sent to EJ.
 - Art. 13^a: Information provided by EJ to competent national authorities
 - Eurojust must provide feedback (existence of links)
- EPOC IV project:
 - Drafting of a data format to exchange data between different case management systems

- Research under EPOC IV *versus* compliance with the revised EJD
- 
- A large blue downward-pointing arrow indicating a flow from the first point to the second.
- Two parallel routes with one common destination:
 - Improve international judicial cooperation, so as to support the fight against serious and organised crime
- 
- A large blue downward-pointing arrow indicating a flow from the second point to the third.
- The revised EJD, through the associated EJ ICT projects initiated and planned by EJ, creates a momentum for realising the EPOC IV project objectives and research findings in practical contexts.

- Usable by 27 different Member States
 - Light technical constraints
- Easy to fill in and send
- Easy to maintain
 - 22 different versions
- Easy to process automatically




- PDF forms with embedded EPOC IV XML

Solution

Art.13 PDF Form

- XML:

**EUROJUST TEMPLATE**
for the transmission of information ex Article 13(5) to (7) of the Eurojust Decision ⁽¹⁾

To be submitted to your National Desk at Eurojust AND re-submitted whenever the information contained needs to be updated.
The fields in gray color are optional fields.

A) GENERAL INFORMATION

1. Originating Member State

2. National file reference number(s)

3. File reference number(s) in other countries concerned

4. Responsible National Authority/Person

5. Has the assistance of Eurojust already been requested?

☐ YES

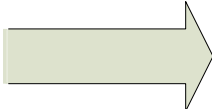
☐ NO

6. Do you intend to attach a file?

☐ YES

☐ NO

EPOC IV
Data exchange standard



Art.13 Extension Schema

ISO 1366
Country Codes



NIEM schema

NA Lookups




Vehicle list



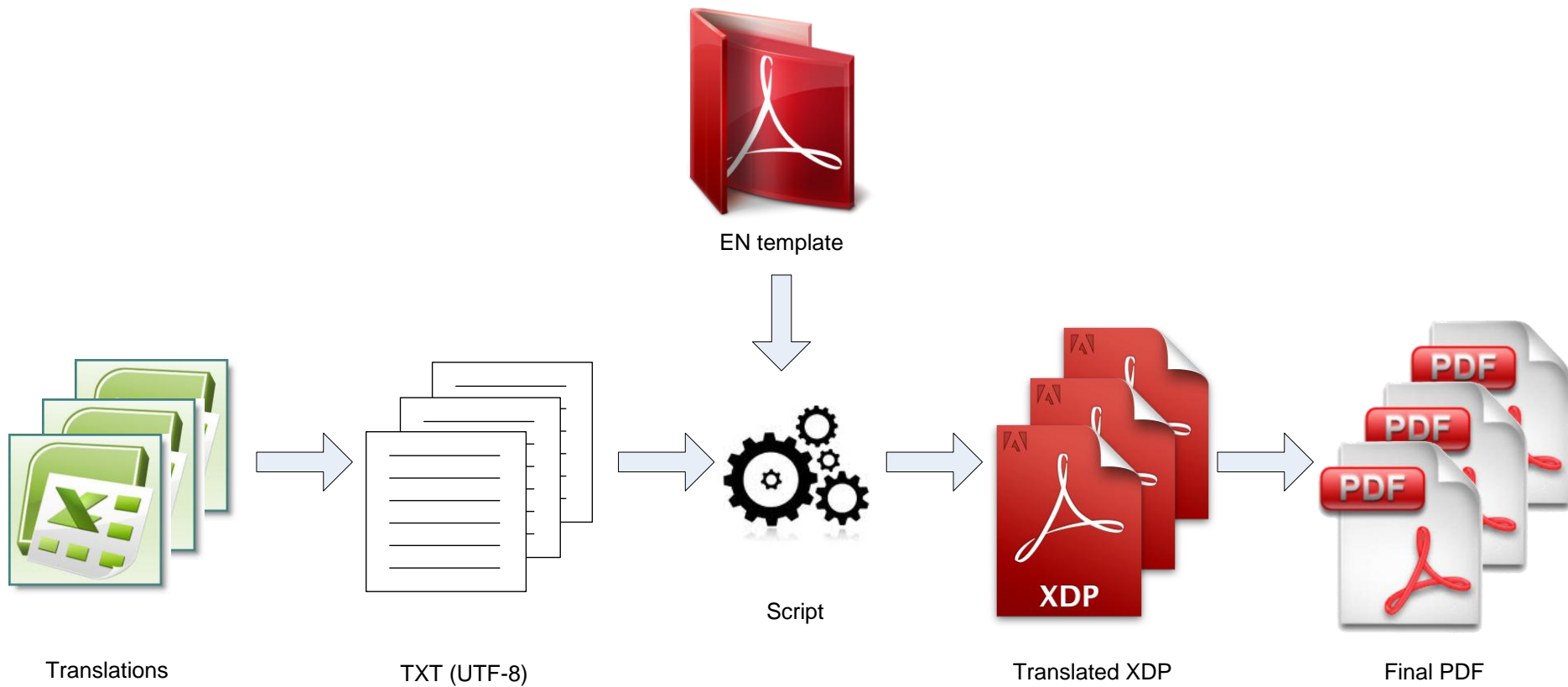
CMS Crime list

•
•
•


NIEM framework

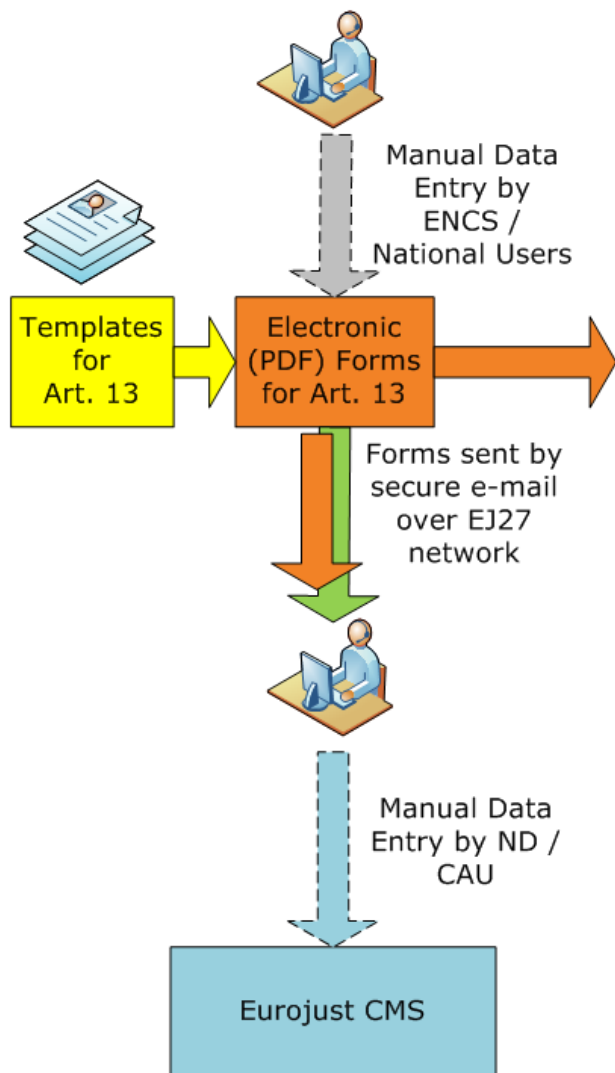
- PDF: version 1.7
- Tools:
 - Adobe Lifecycle suite
 - Adobe Acrobat Pro
- In-house developed script
- Usable in Acrobat Reader > Version 9

Generation workflow

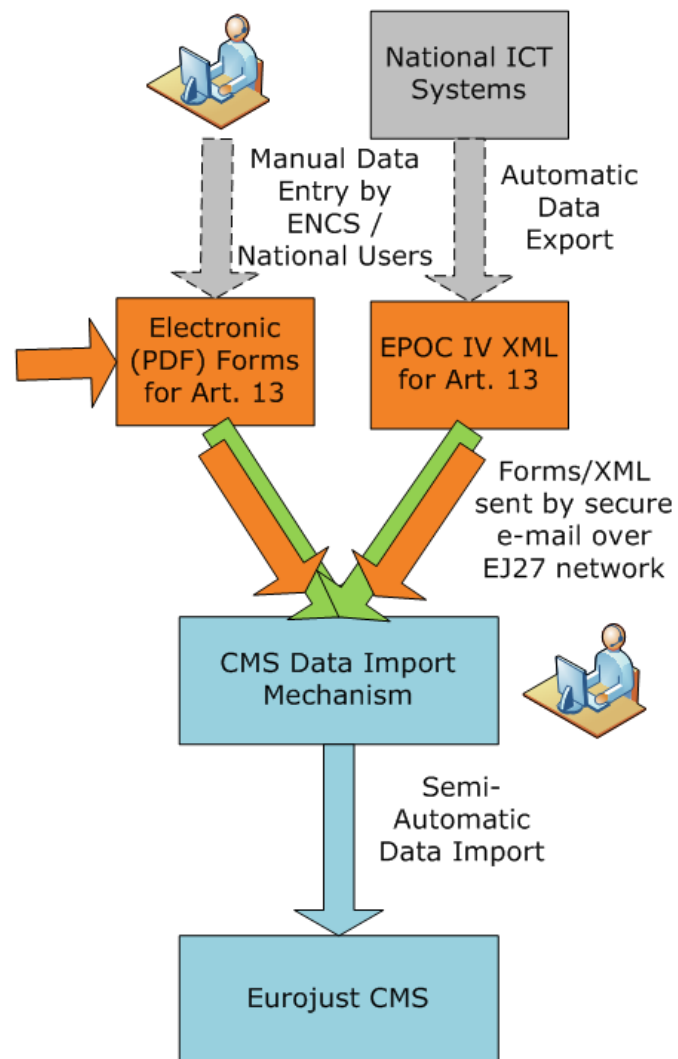


- Integration with Case Management System
 - v3.3 to be released in May 2012
- Usability first: the form is imported directly by the user
- Two ways of importing information:
 - From the CMS application
 - From Outlook
- Characteristics:
 - Semi-automated
 - Multi-step process
 - Data validation

How is it now?



How will it be?



- Further automation of Art.13 data exchange workflows
 - Automatic export of information from from national ICT systems
 - Automatic (or semi) import into Eurojust's CMS
- Full CMS-EPOC IV integration (not only for Art.13 data)
- Implementation of EPOC IV NAS as international component of ENCS ICT system in MS's

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Final Conference 2012

Day 2 Item 8

The Future of EPOC

Jon Broughton

Head of Information Management - Eurojust



With financial support from Criminal Justice Programme 2008
European Commission – Directorate-General Justice, Freedom and Security

- Context
- Approach
- Areas of investigation EPOC V
- EPOC V Structure
- Objectives

- Early EPOC - Focus on Eurojust
 - Case Management System
 - Security and data protection
 - Compliance Eurojust Legal Basis
- EPOC IV - Focus on Member States
 - A Data Standard to structure data for communication
 - An EPOC NAS Application to manage data and communication
 - A number of flexible scenarios to facilitate Member States
 - A means to coordinate and manage change
- Further work is planned in the proposed EPOC V project

- EPOC IV focused on developing capability
 - The means to exchange information by a common data standard not unique to one application
 - A flexible way to use the standard using EPOC NAS
 - Proven by experimentation
- EPOC V will focus on developing control
 - Governance of Data Standards
 - Management of Information
 - Identifying practical uses of the data standard and software.
- An approach to deliver Strategic, Tactical and Operational results

- Governance
 - The key to interoperability
- Managing Change in Data Standards
 - What mechanisms are needed
 - How will decision be taken
- Convergence of Data Standards
 - UMF 2, E-Codex, ECRIS, ISA programme
 - How can convergence be facilitated
 - Reuse existing solutions

- Control of data exchanges
 - What has been exchanged. Versions , details and content.
 - Proof of receipt and acceptance.
 - Method of exchange
 - Notification if updates occur at source
- Data Standard
 - Extend and review content
 - Experiment with governance proposal
 - Adapt the data standard to fit governance model

- Identify benefits for practitioners in their daily work
- Automated features to help daily activities
 - What are the real needs of the user
 - What processes need to be considered
 - What other bilateral relationships can be added to EPOC NAS
- By Extending EPOC NAS we will be able to experiment and support the overall results of the project

- 10 Partners including Eurojust and Sirfin PA
 - 2 new countries invited, Belgium and Portugal
 - Bulgaria
 - France
 - Italy
 - Lithuania
 - The Netherlands
 - Slovenia
- Application for an Action Grant submitted
 - Duration 24 months
 - Estimated Budget €1.2M
 - 5 Objectives

| 2013 | | | | | | | | | | | | 2014 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----|--------|----|---------------|----|--------|----|----------|----|--------|----|-----------|----|-------|----|-------------|----|----|----|-------|----|----|----|-------|--|--|--|--|--|--|--|-----|--|--|--|--|--|--|--|----|--|--|--|
| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | | | | | | | | | | | | | | | | | | | | |
| Work Stream 1 Investigate Governance Model for European Data Standards | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Research | | | | Analysis | | | | Drafting | | | | Promotion | | | | | | | | Final | | | | | | | | | | | | | | | | | | | | | | | |
| Work Stream 2 Further Evolution of the National Authority System Software (NAS) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scope | | Design | | Develop | | Design | | Develop | | Design | | Develop | | Final | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Work Stream 3 Extend the EPOC Data Standard | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Requirements | | | | Specification | | | | Document | | | | Implement | | | | update | | | | Final | | | | | | | | | | | | | | | | | | | | | | | |
| Work Stream 4 Promotion and experimentation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Prepare | | Ex 1 | | Prepare | | Ex 2 | | Prepare | | Ex 3 | | Final | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Work Stream 5 Extend coordination support tools. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Proposal | | | | Prototype | | | | Trial | | | | Feedback | | | | Development | | | | Test | | | | Final | | | | | | | | | | | | | | | | | | | |
| Project Meeting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PM1 | | | | | | | | PM2 | | | | | | | | PM3 | | | | | | | | PM4 | | | | | | | | PM5 | | | | | | | | FC | | | |



END

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